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FIG. 1A

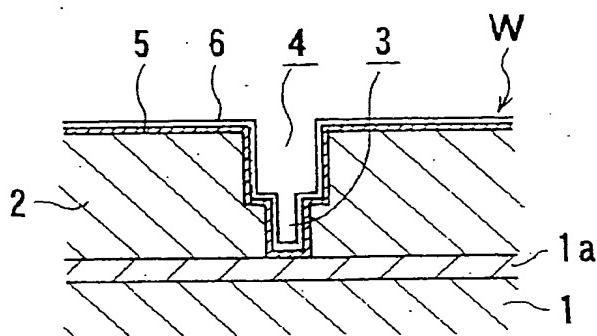


FIG. 1B

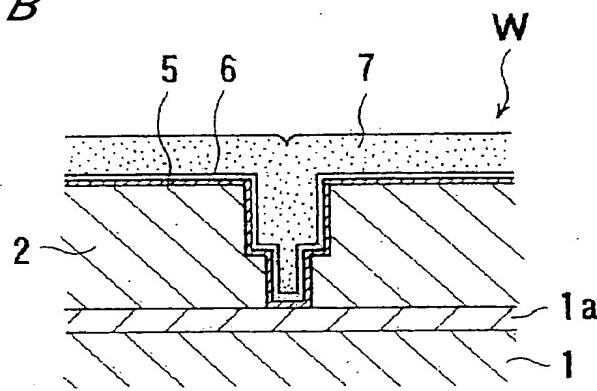


FIG. 1C

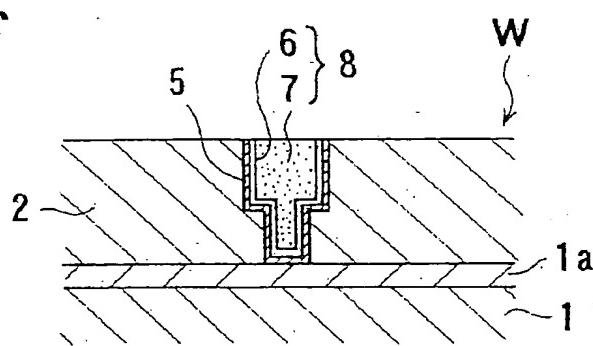


FIG. 1D

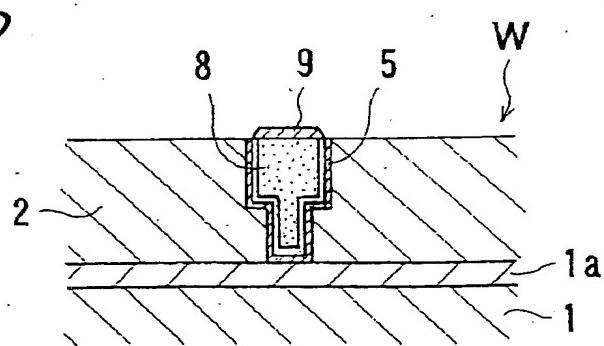
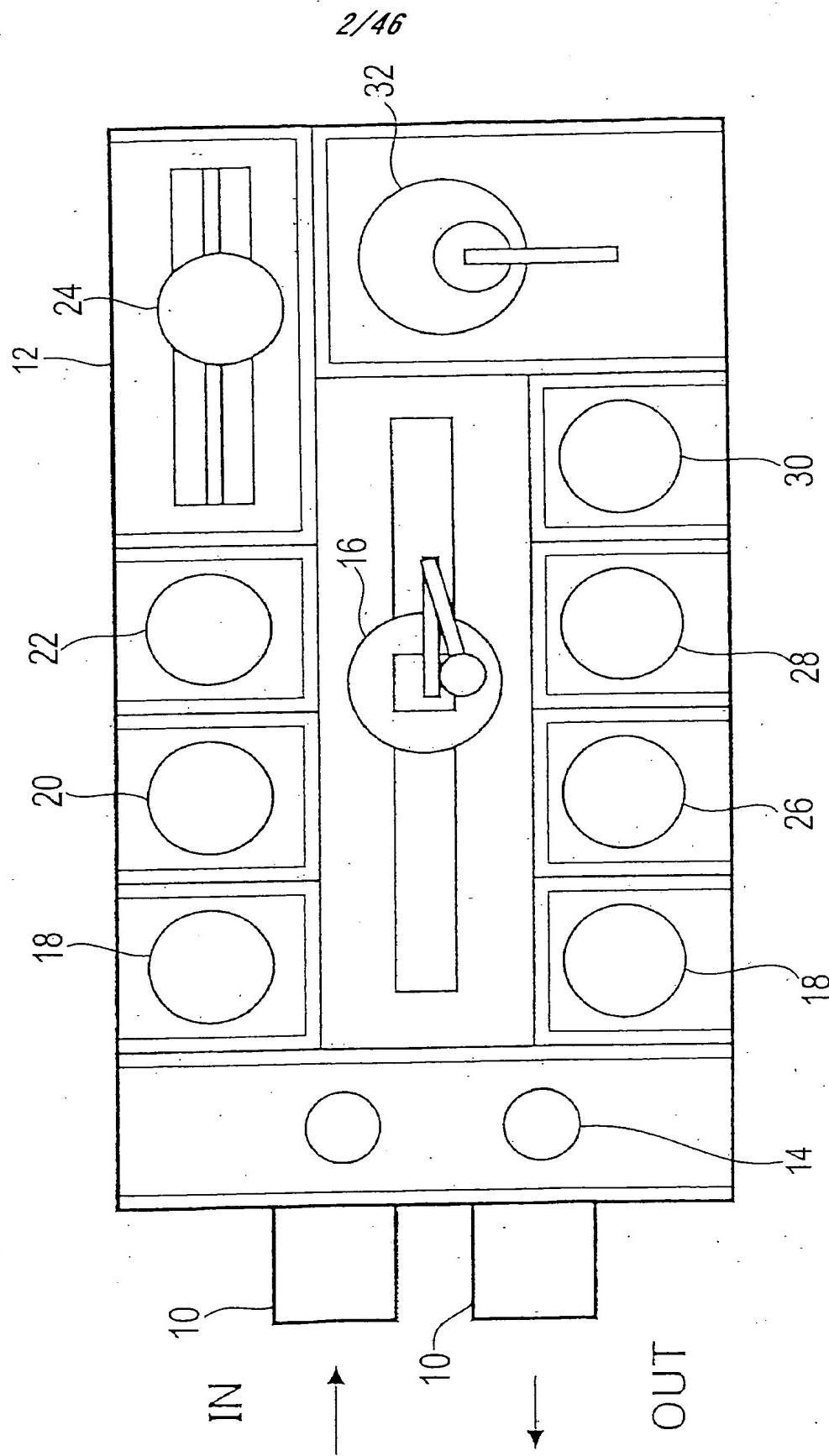
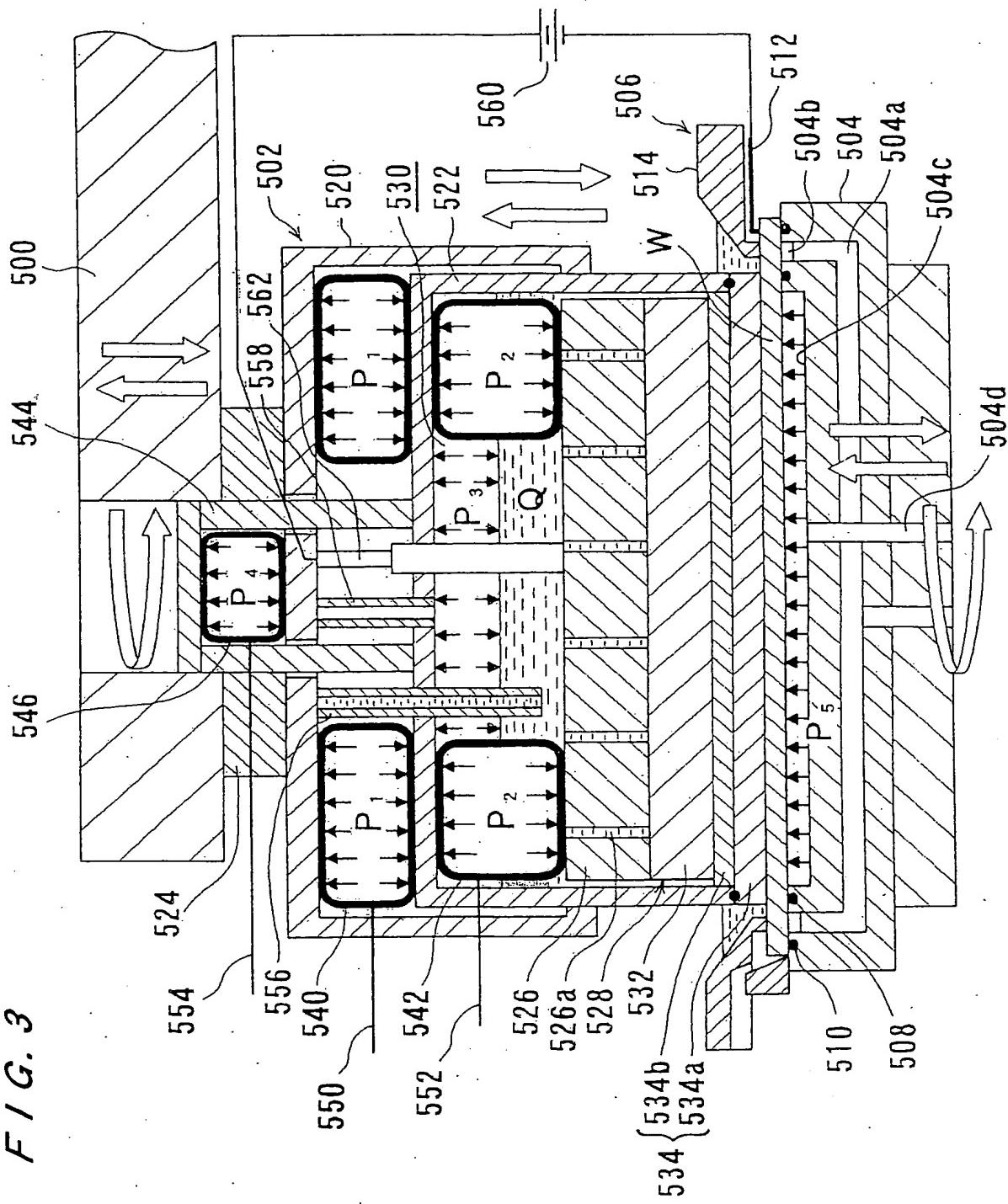


FIG. 2



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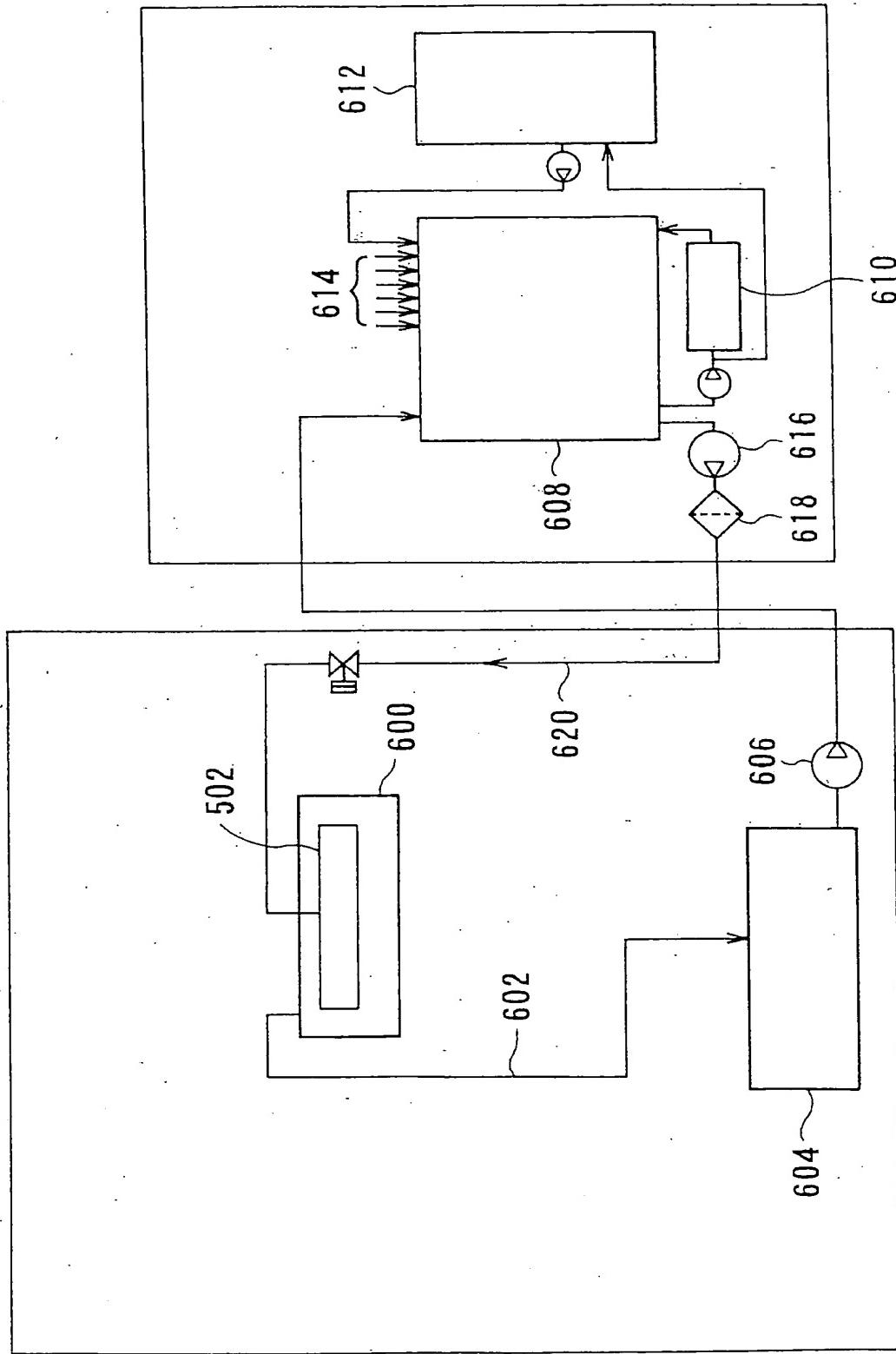
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FIG. 4

	idle	raise the arm	swing the arm	lower the arm	discharge the plating liquid	apply the voltage	raise the head	pressurize	raise the arm	swing the arm	idle
arm θ axis	retreat position	process position									
arm Z axis	retreat position	swing position	process position								
plating power source	ON	OFF									
P_1	atmospheric pressure(Free)										
P_2	atmospheric pressure(Free)										
P_3	atmospheric pressure(Free)										
P_4	pressurize (low)	pressurize (high)									
P_5	atmospheric pressure(Free)										
rotate the head							rotate				
rotate the stage							stop				

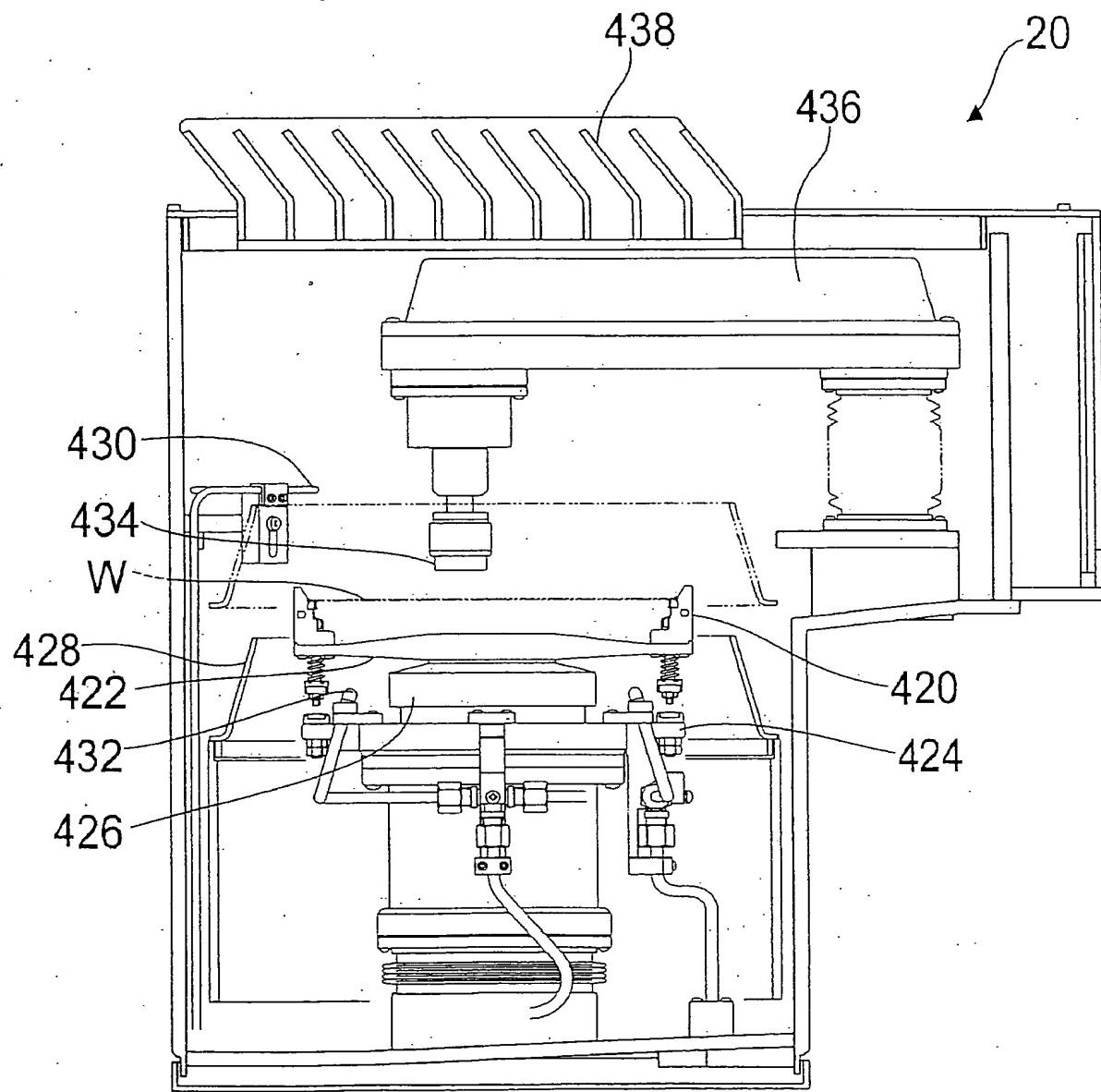
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FIG. 5



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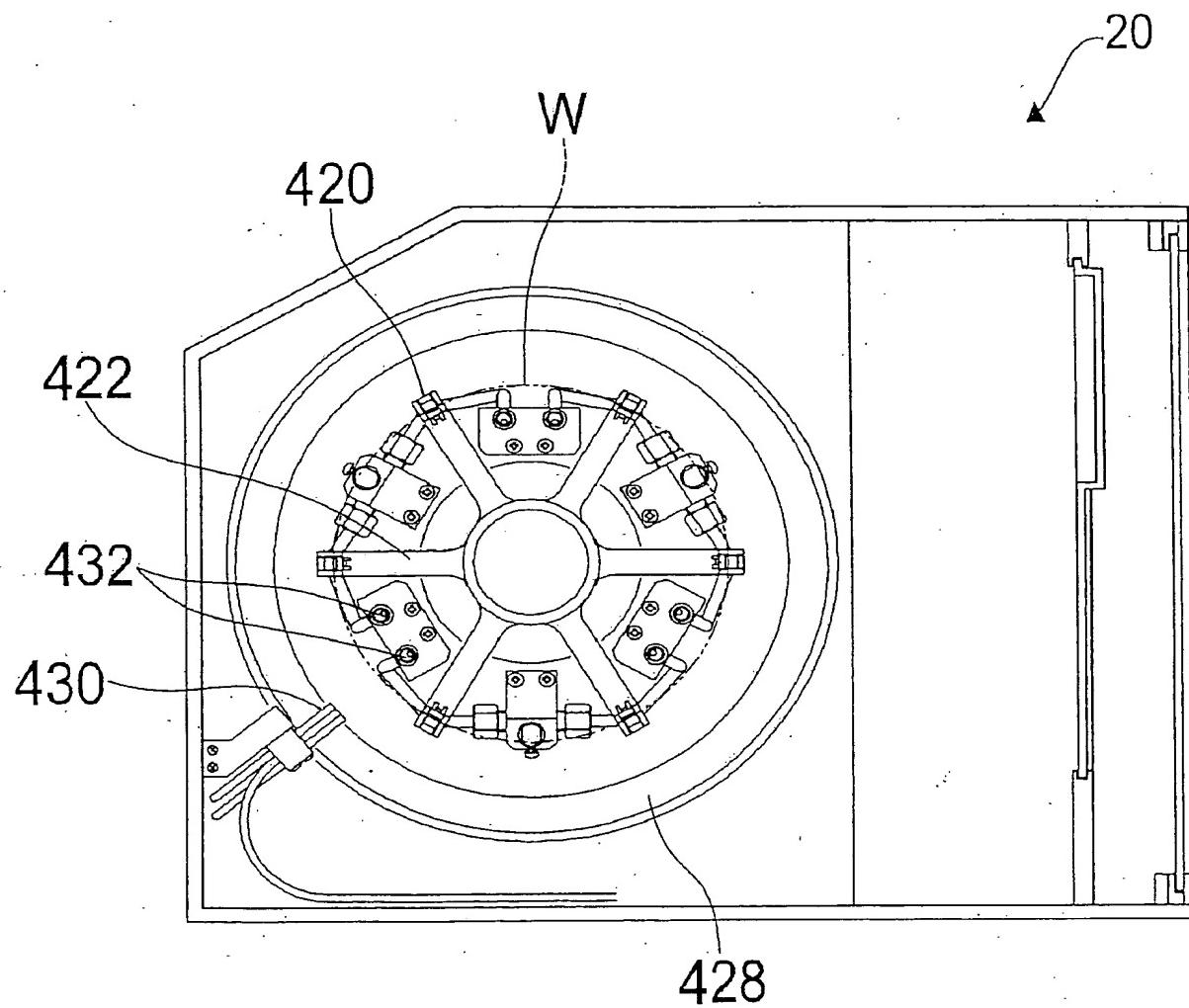
F / G. 6



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F / G. 7



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FIG. 8

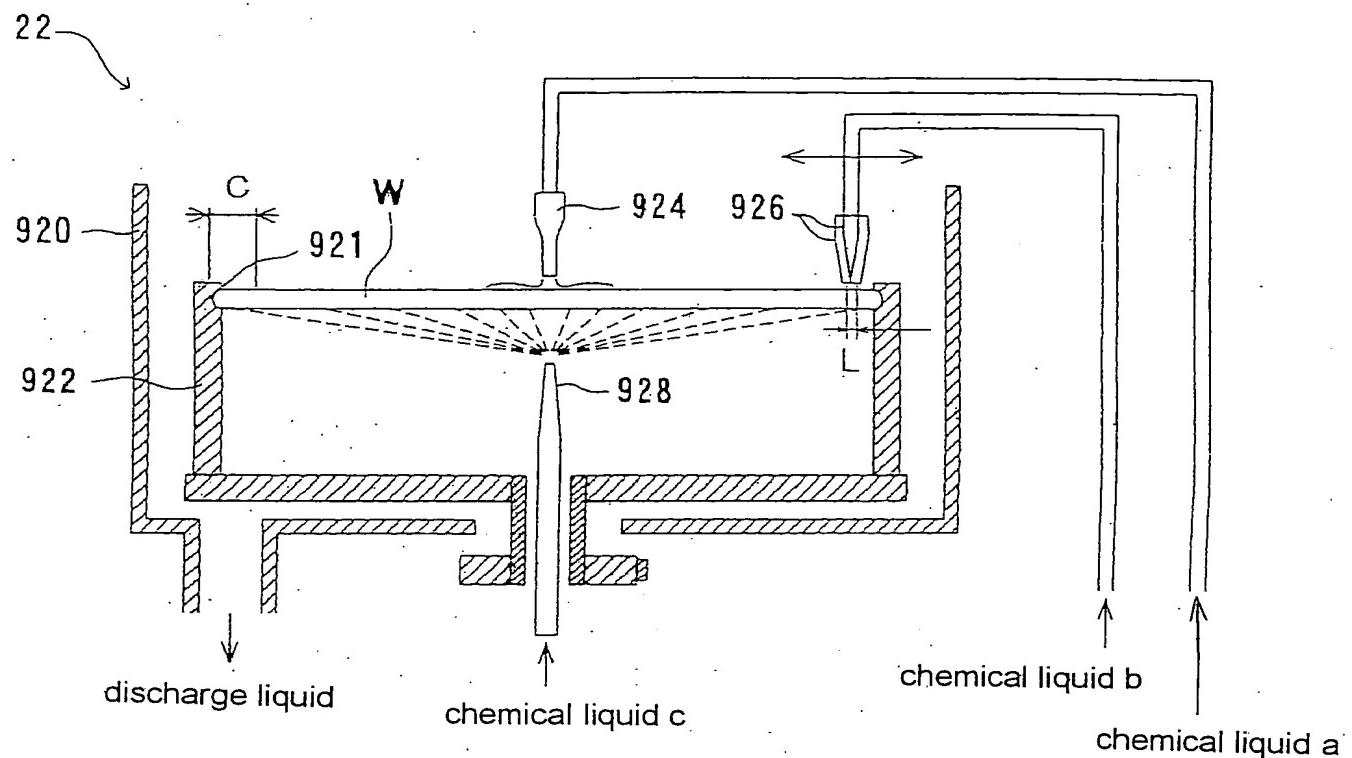
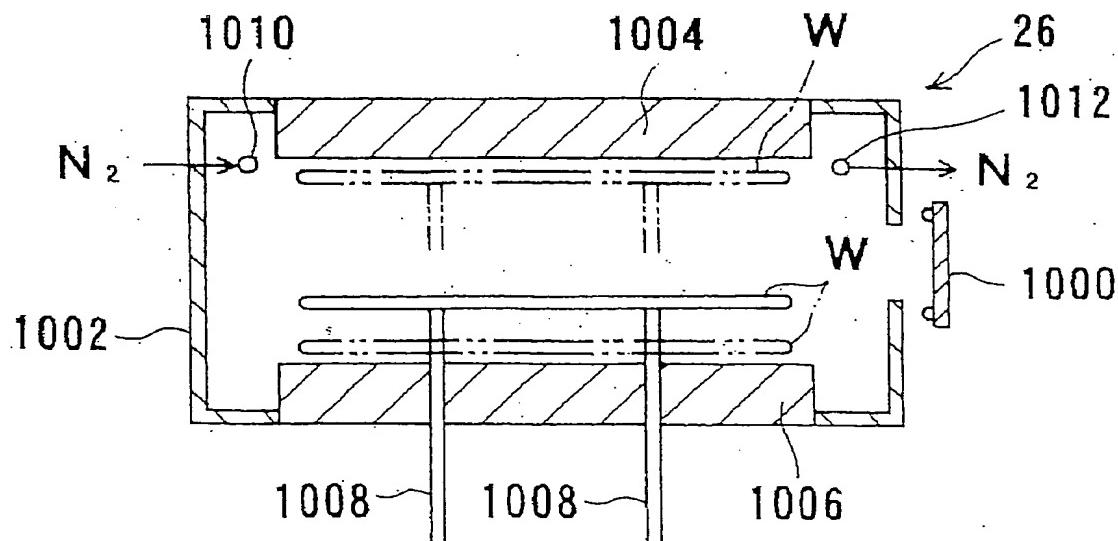
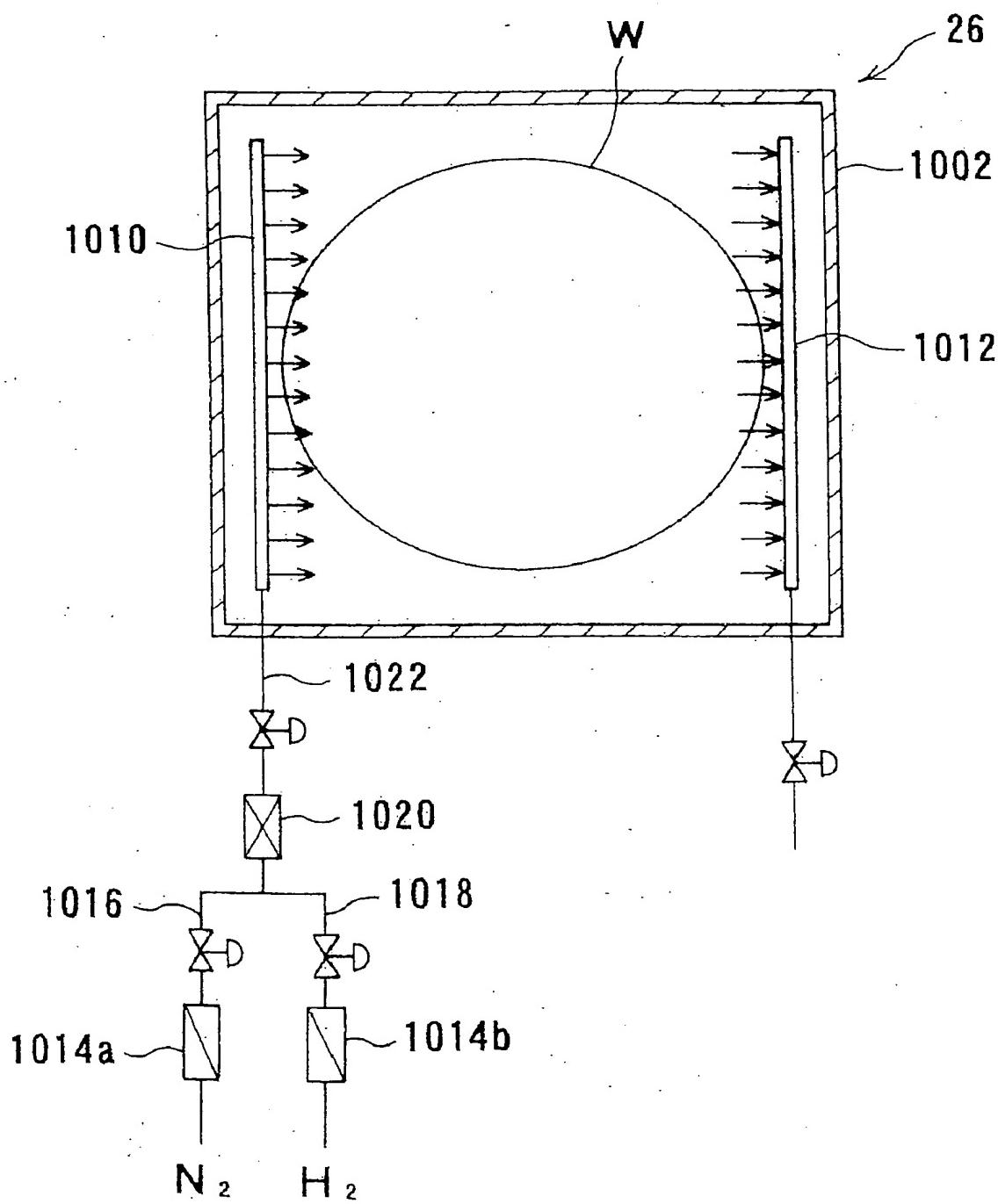


FIG. 9



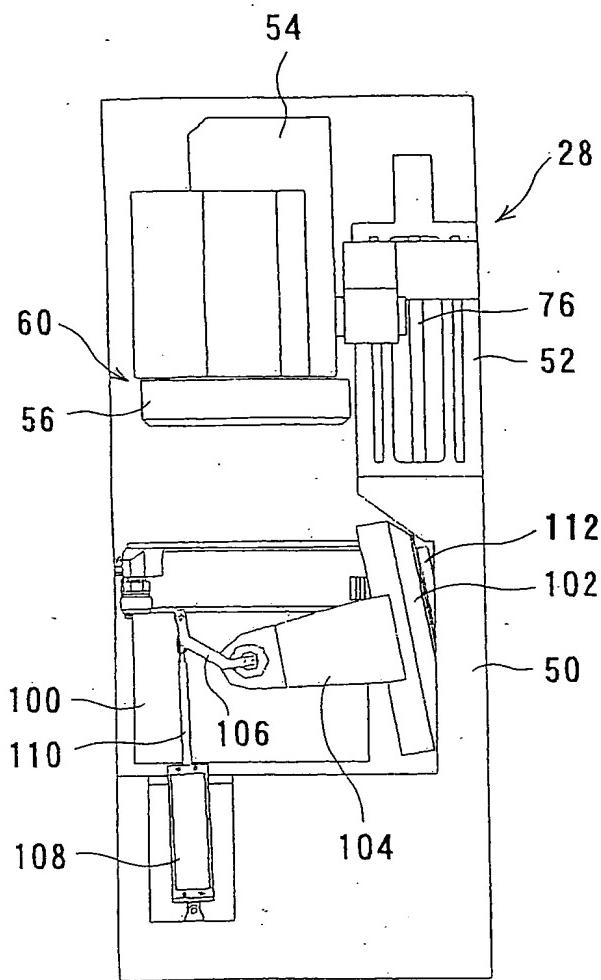
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FIG. 10



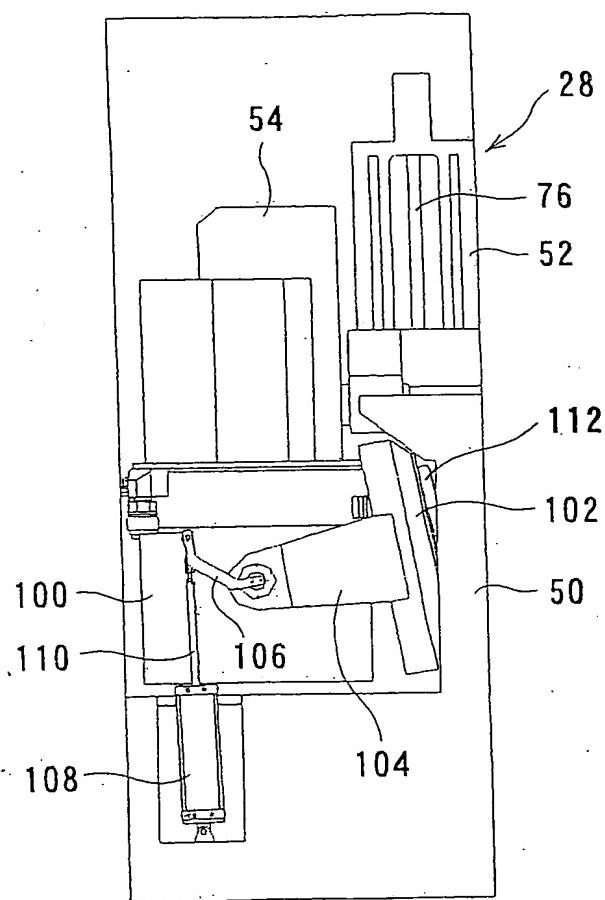
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FIG. 11



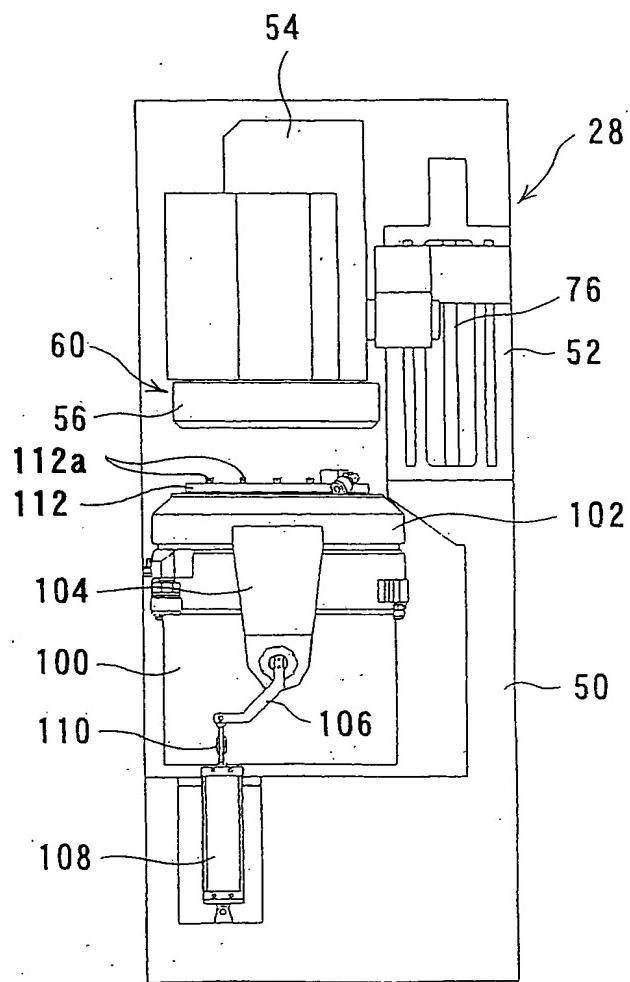
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FIG. 12



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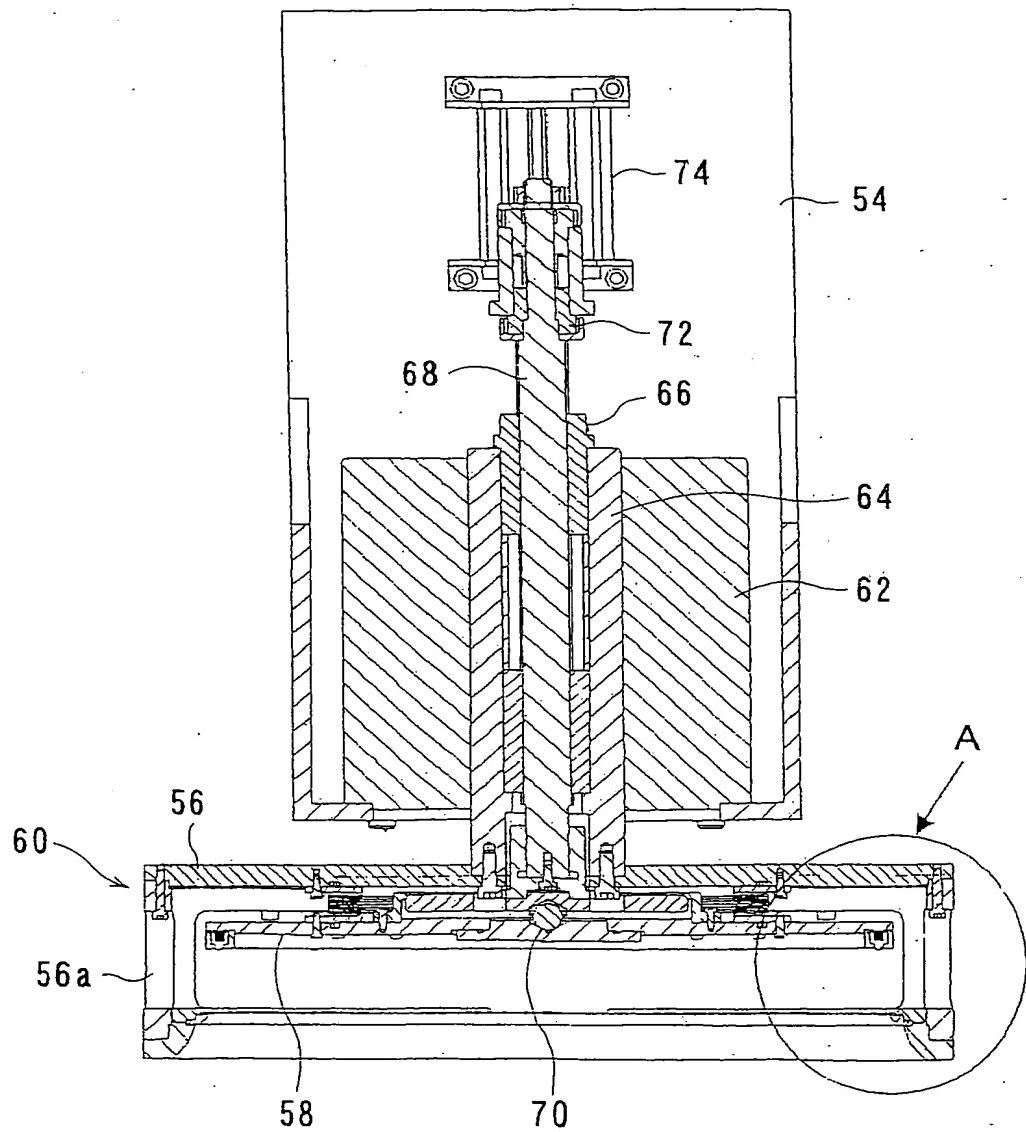
FIG. 13



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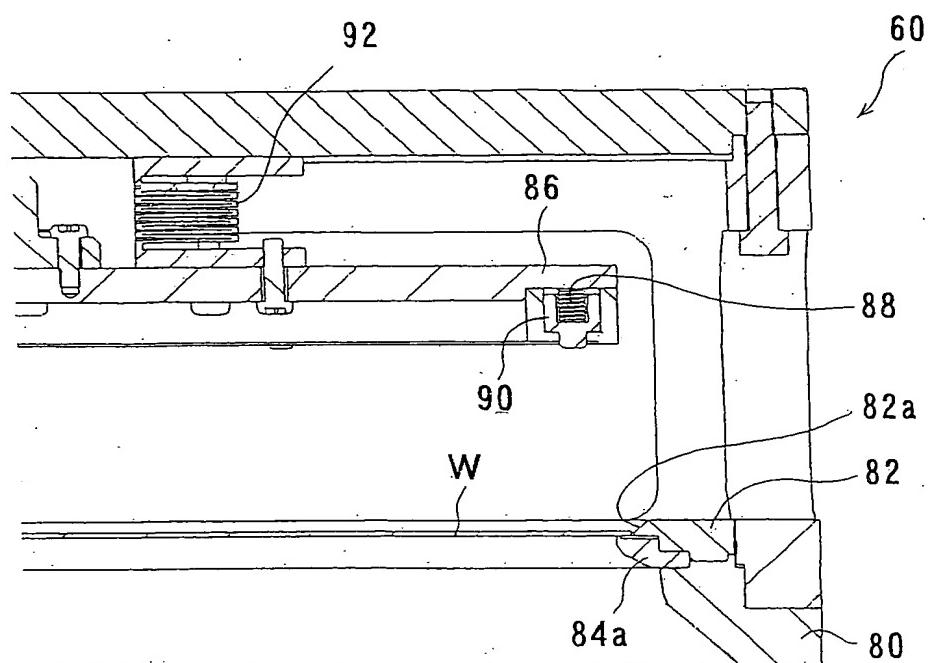
FIG. 14



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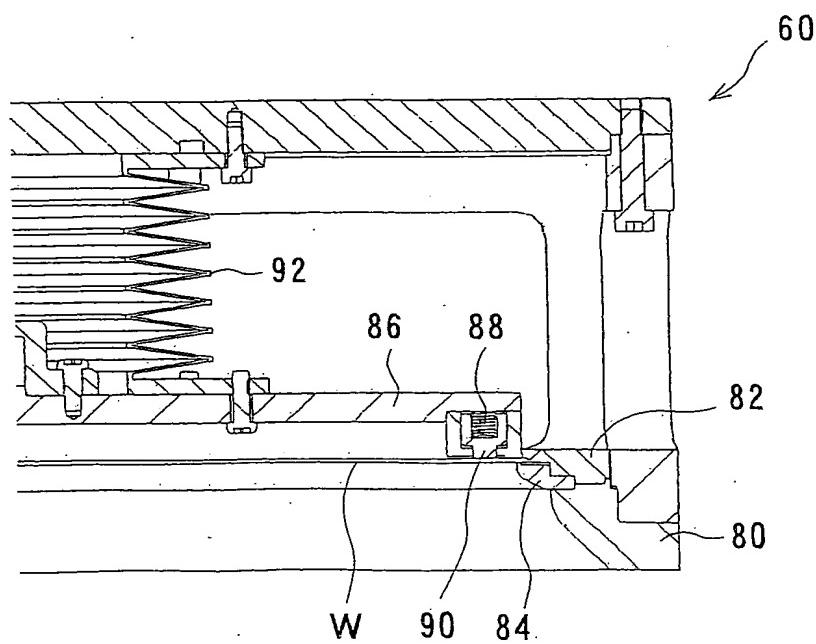
FIG. 15



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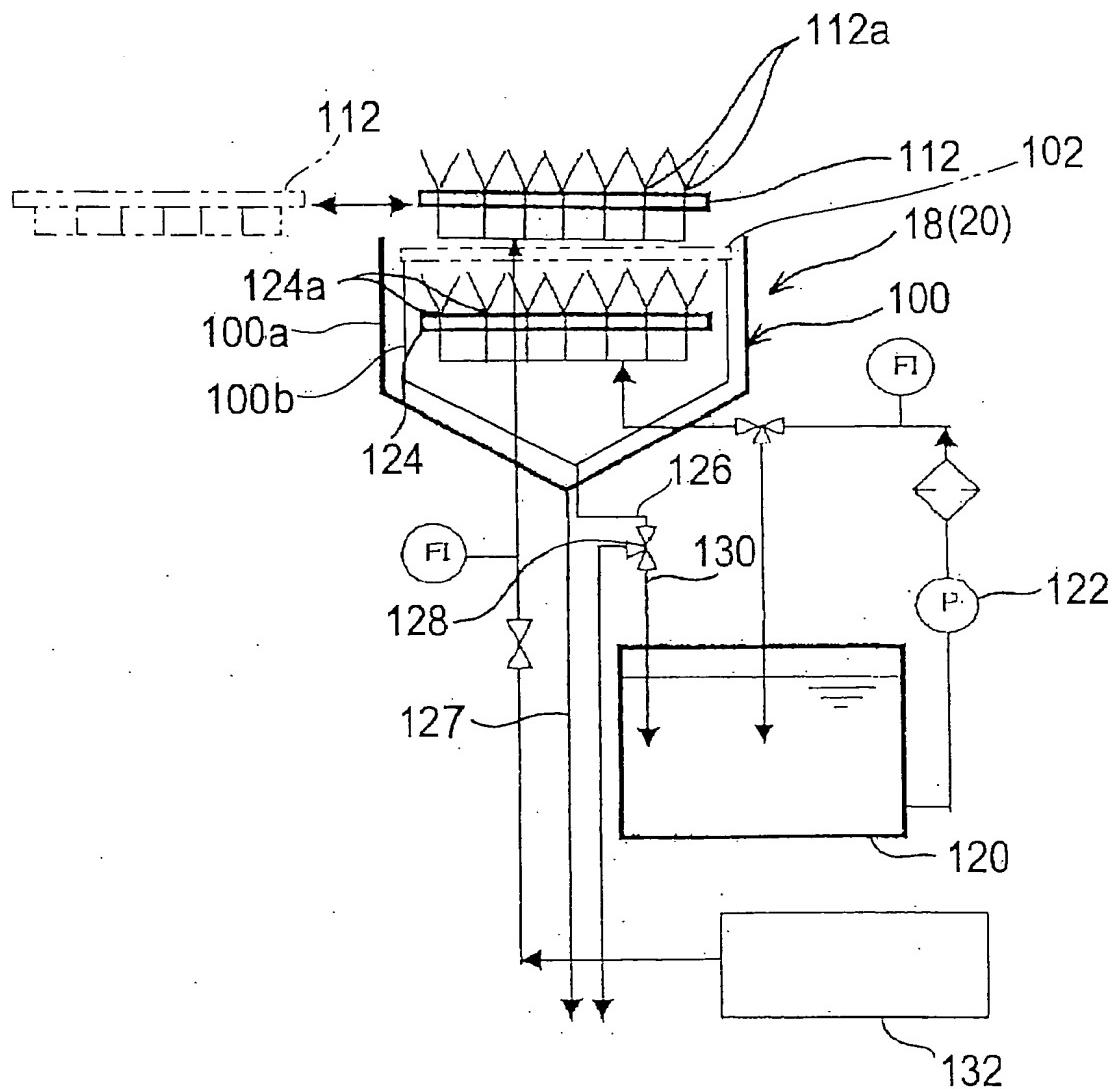
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FIG. 16



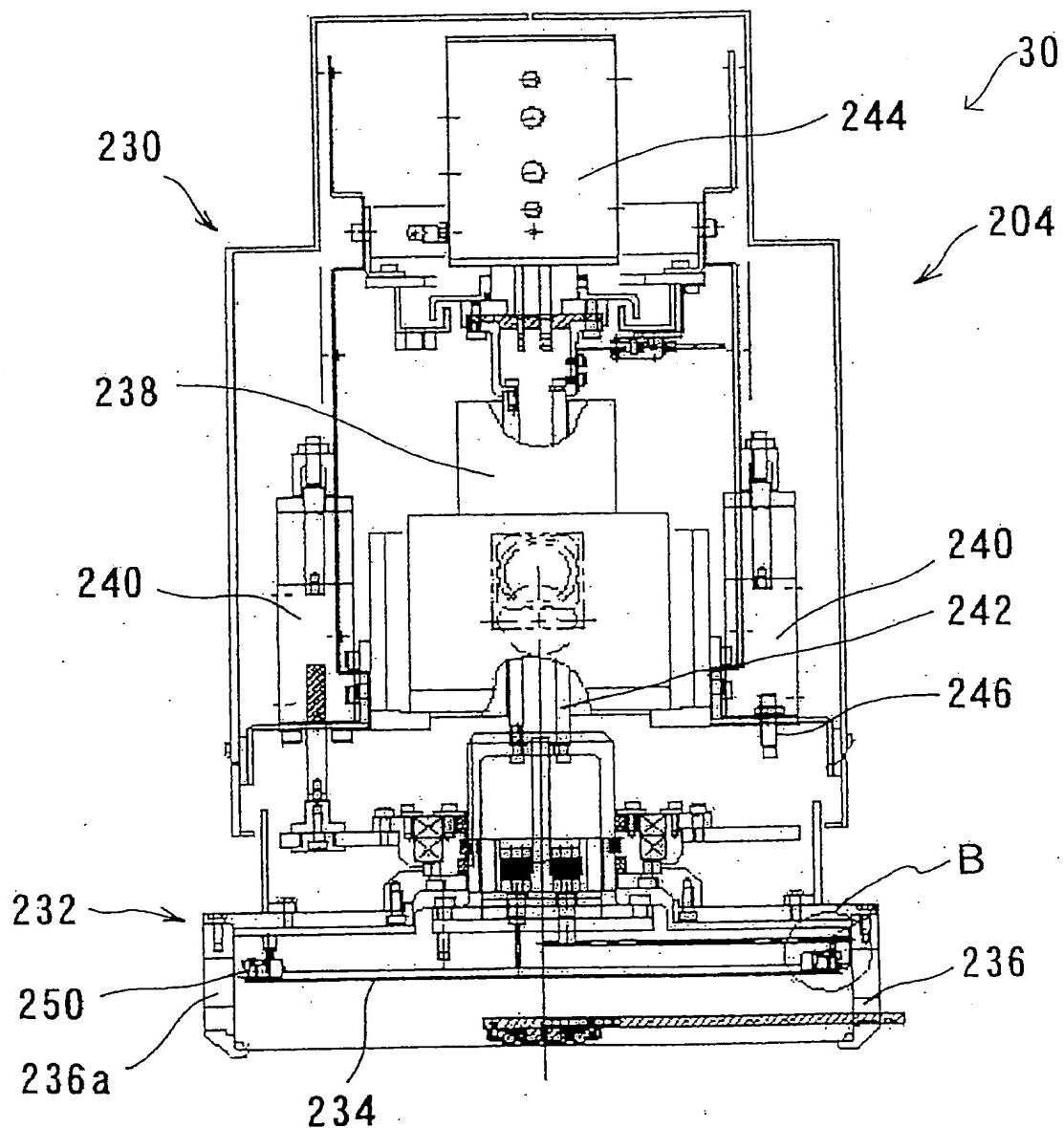
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FIG. 17



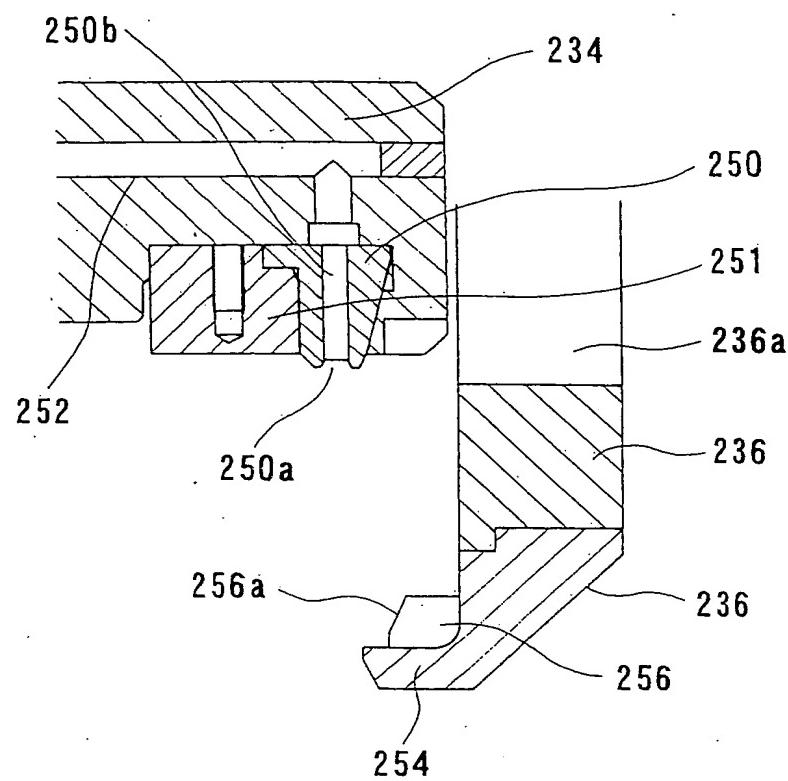
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FIG. 18



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FIG. 19



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FIG. 20

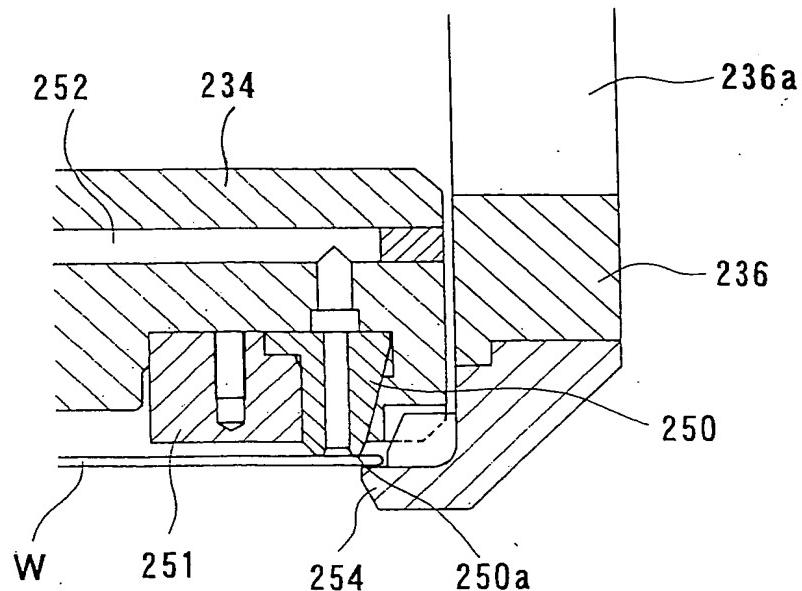
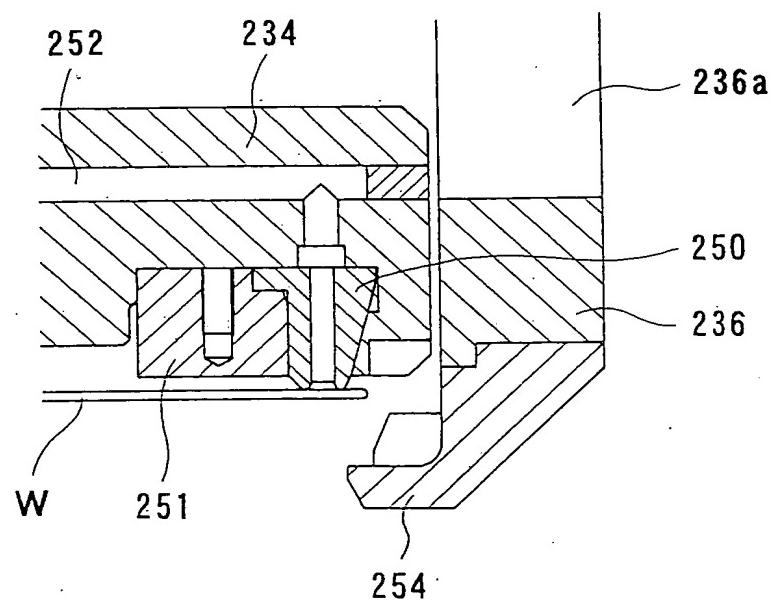
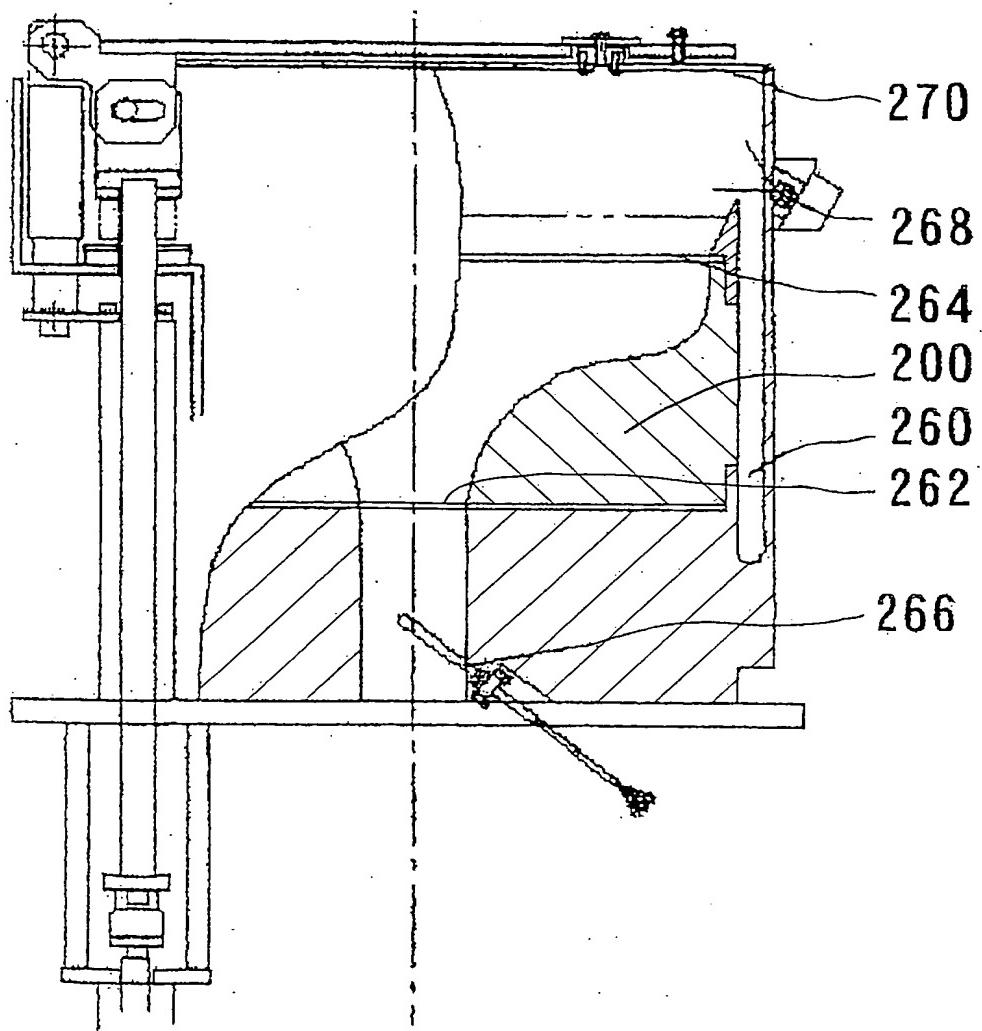


FIG. 21



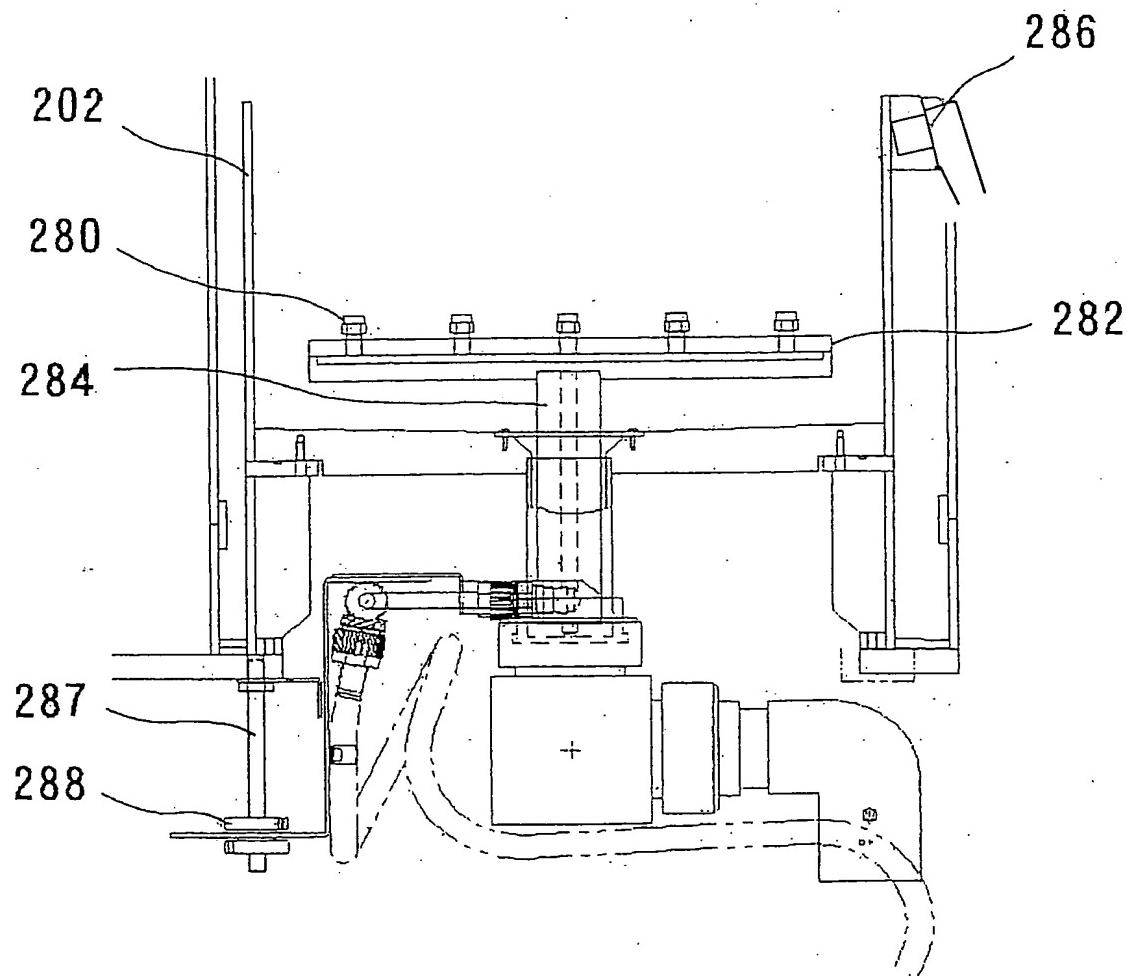
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FIG. 22



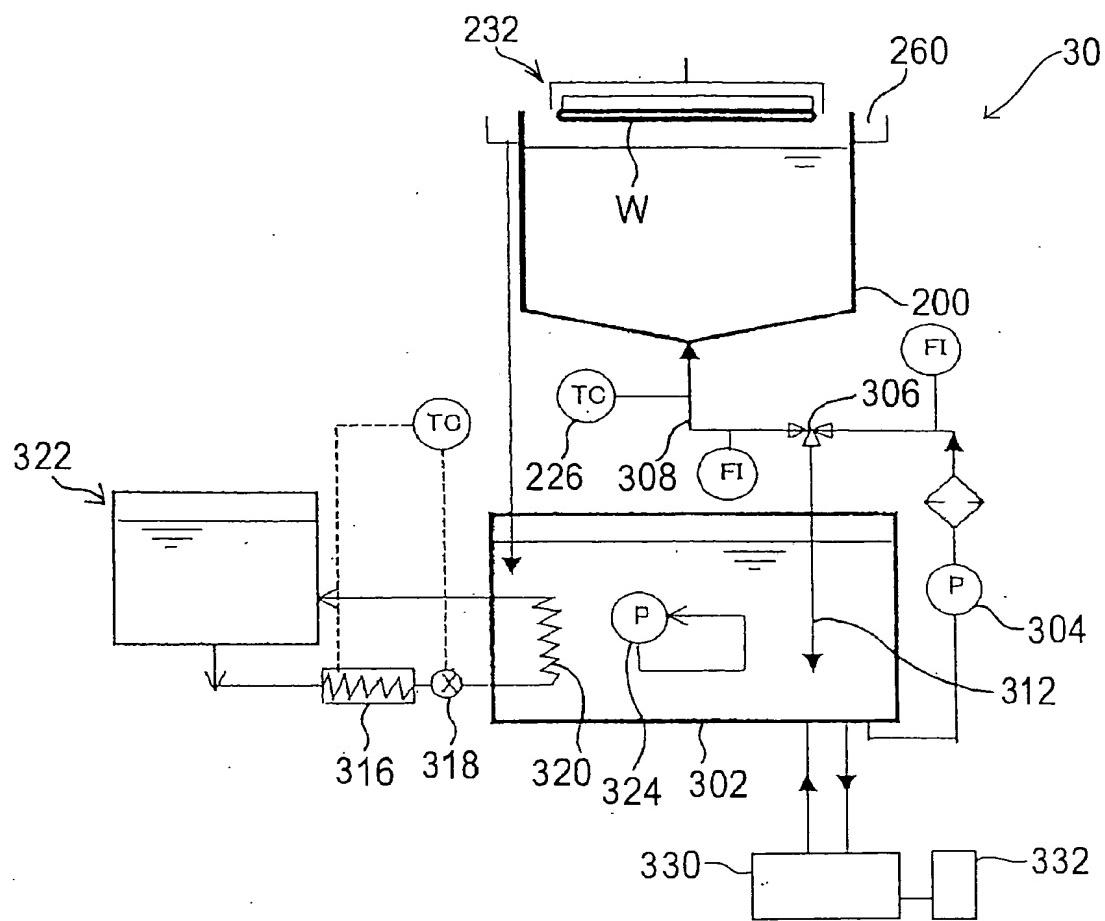
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FIG. 23



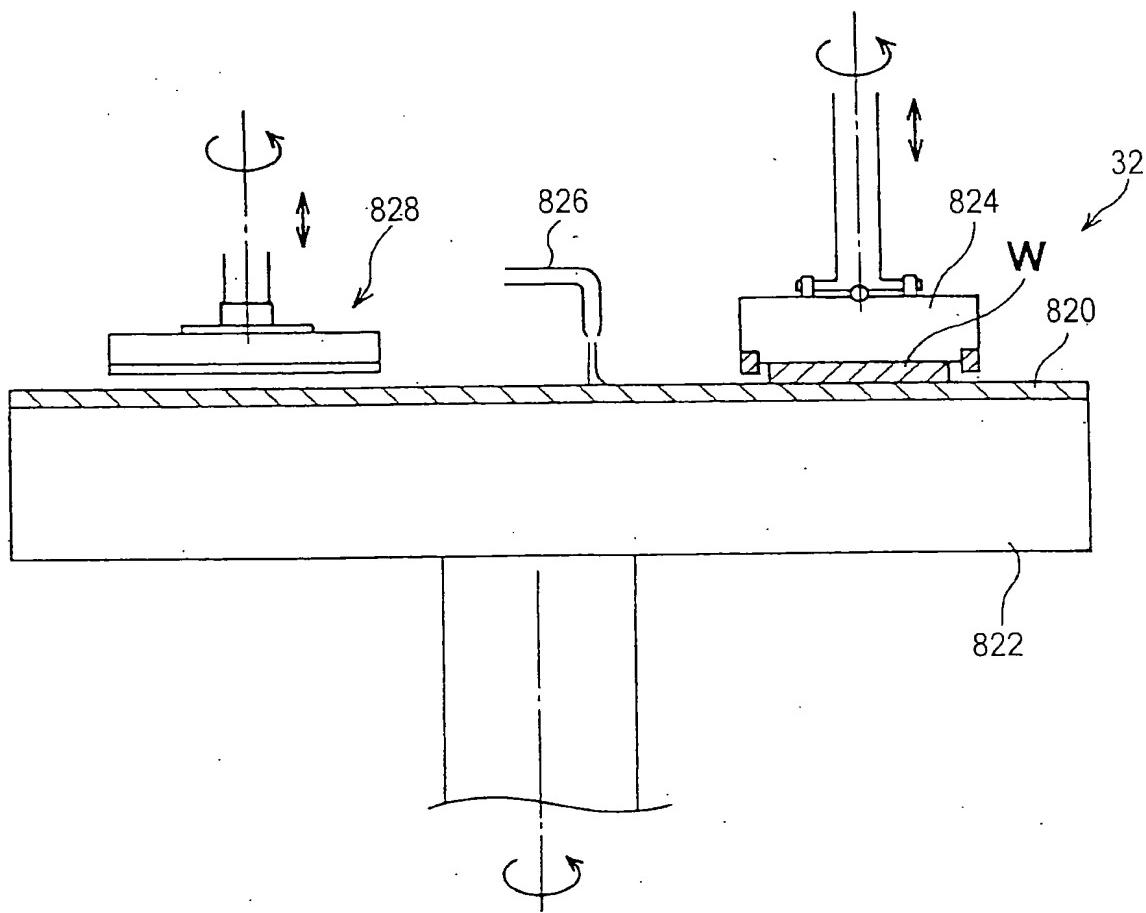
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FIG. 24



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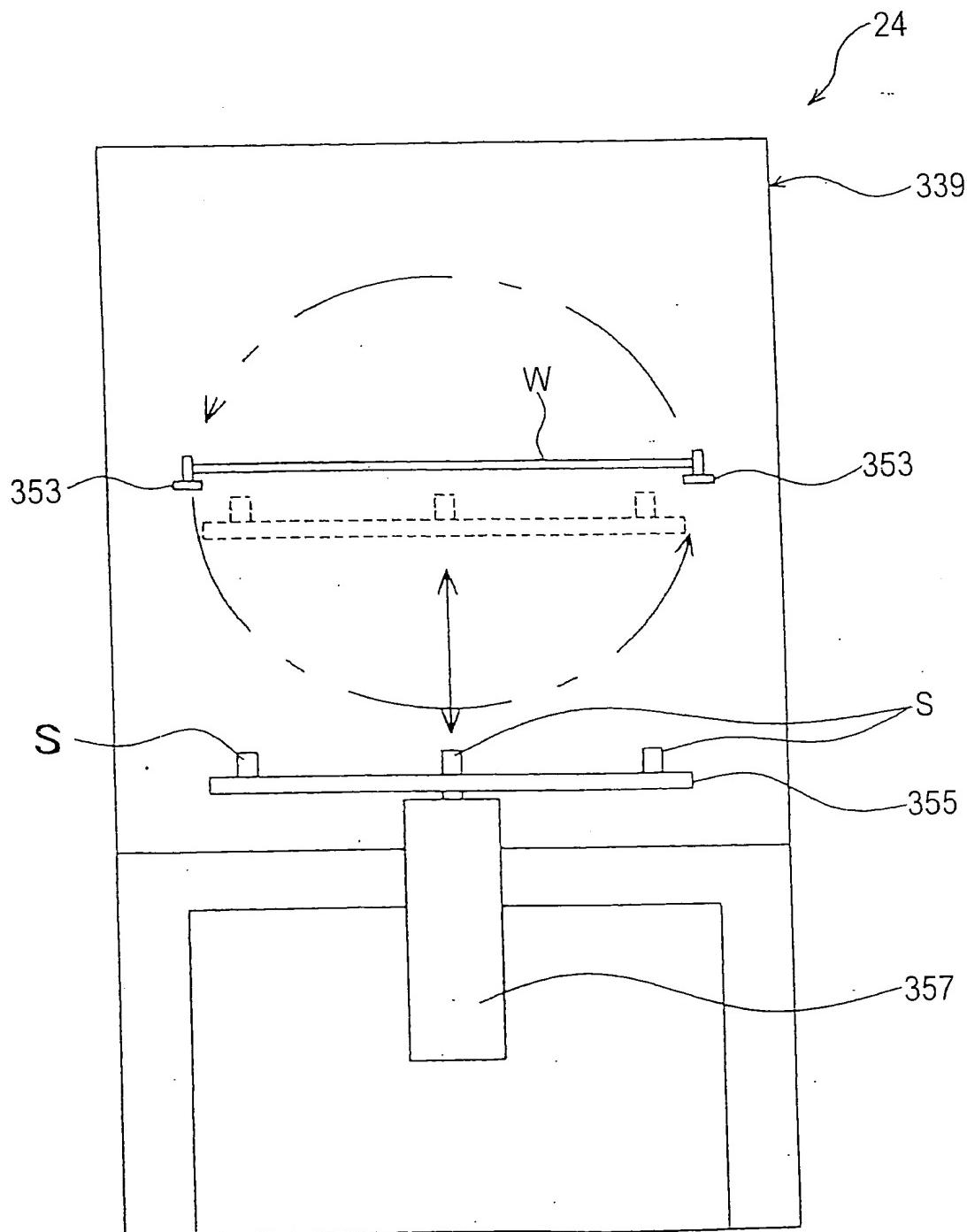
FIG. 25



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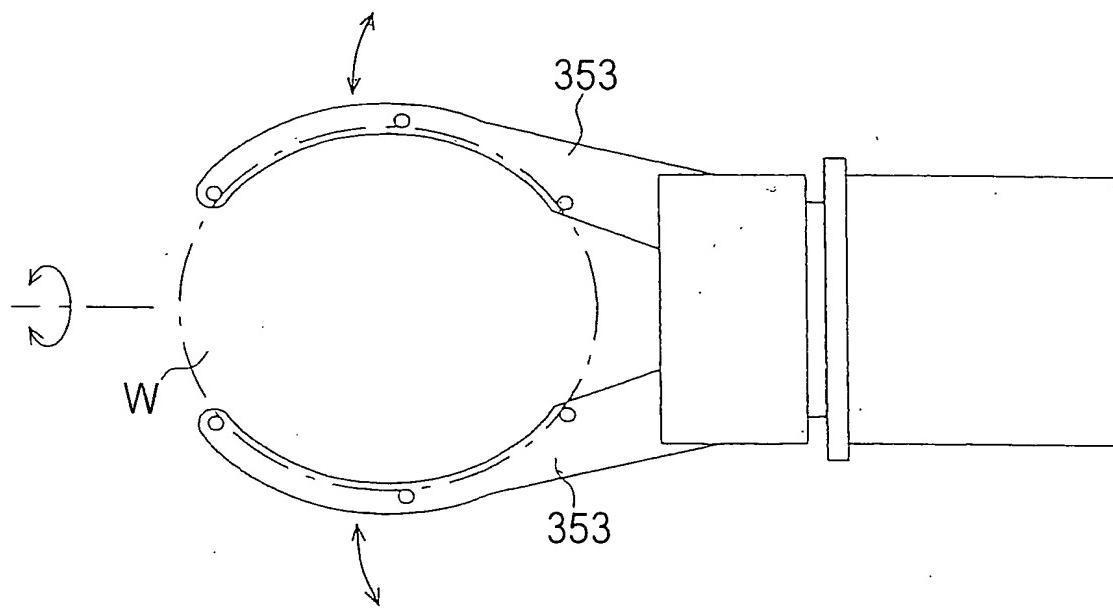
FIG. 26



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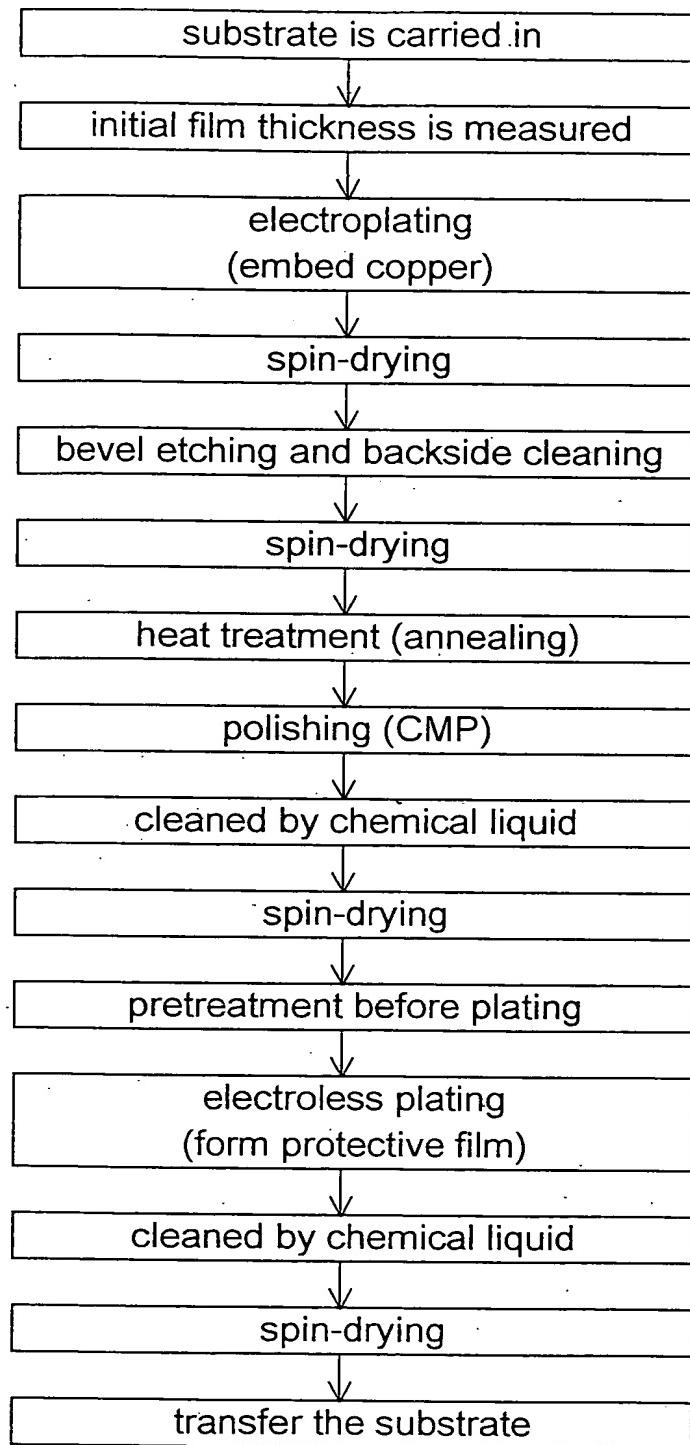
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F I G. 27



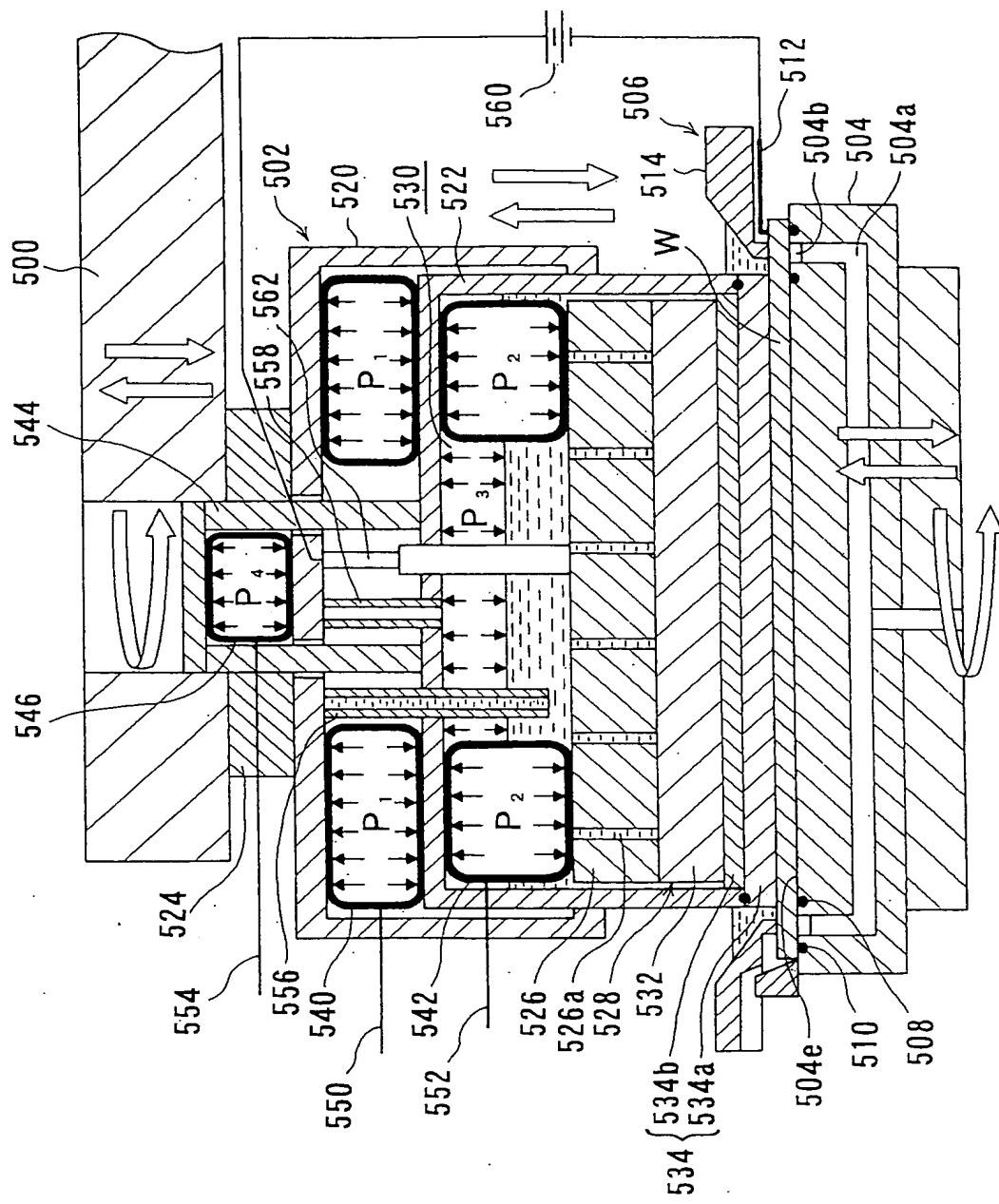
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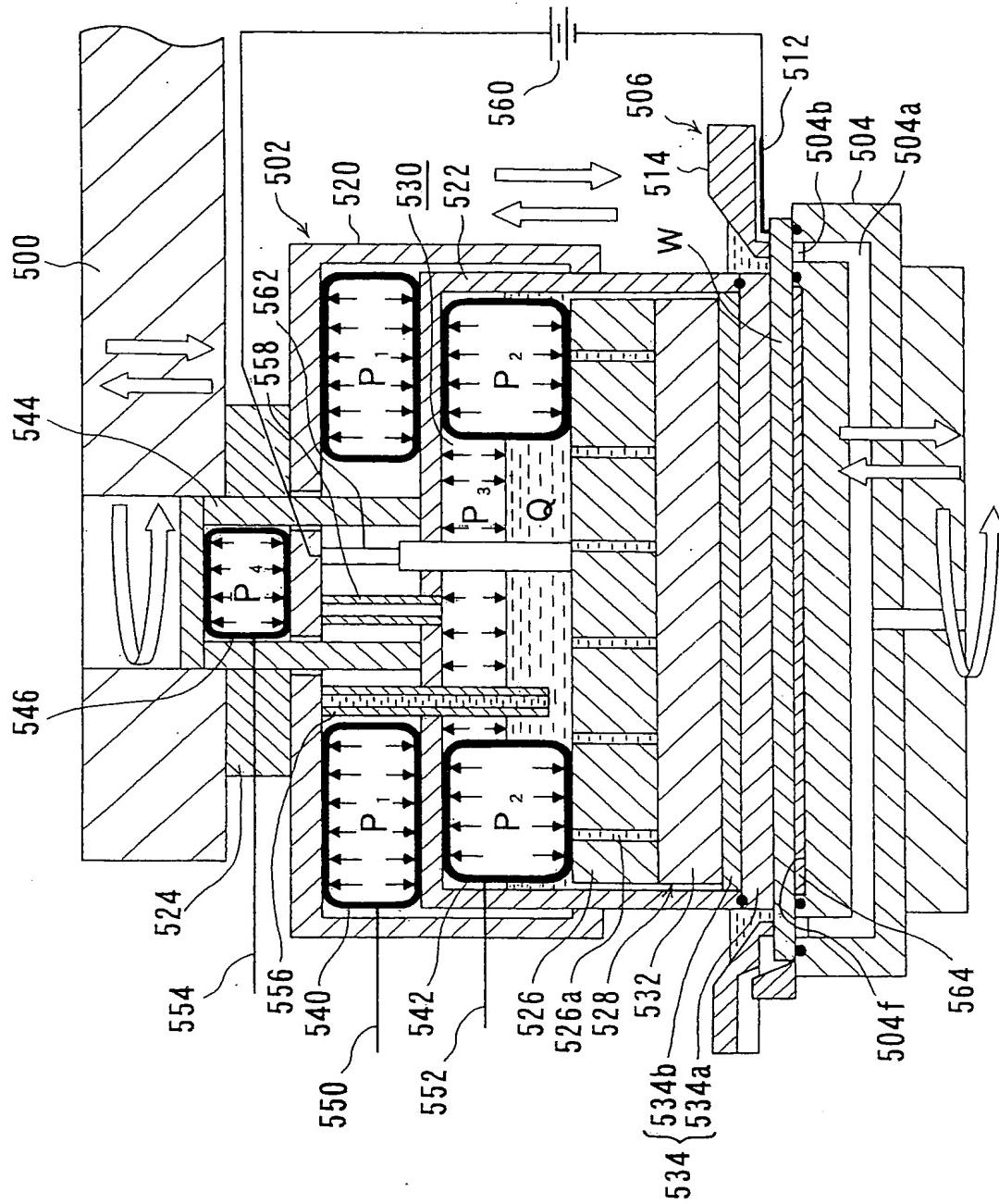
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FIG. 29



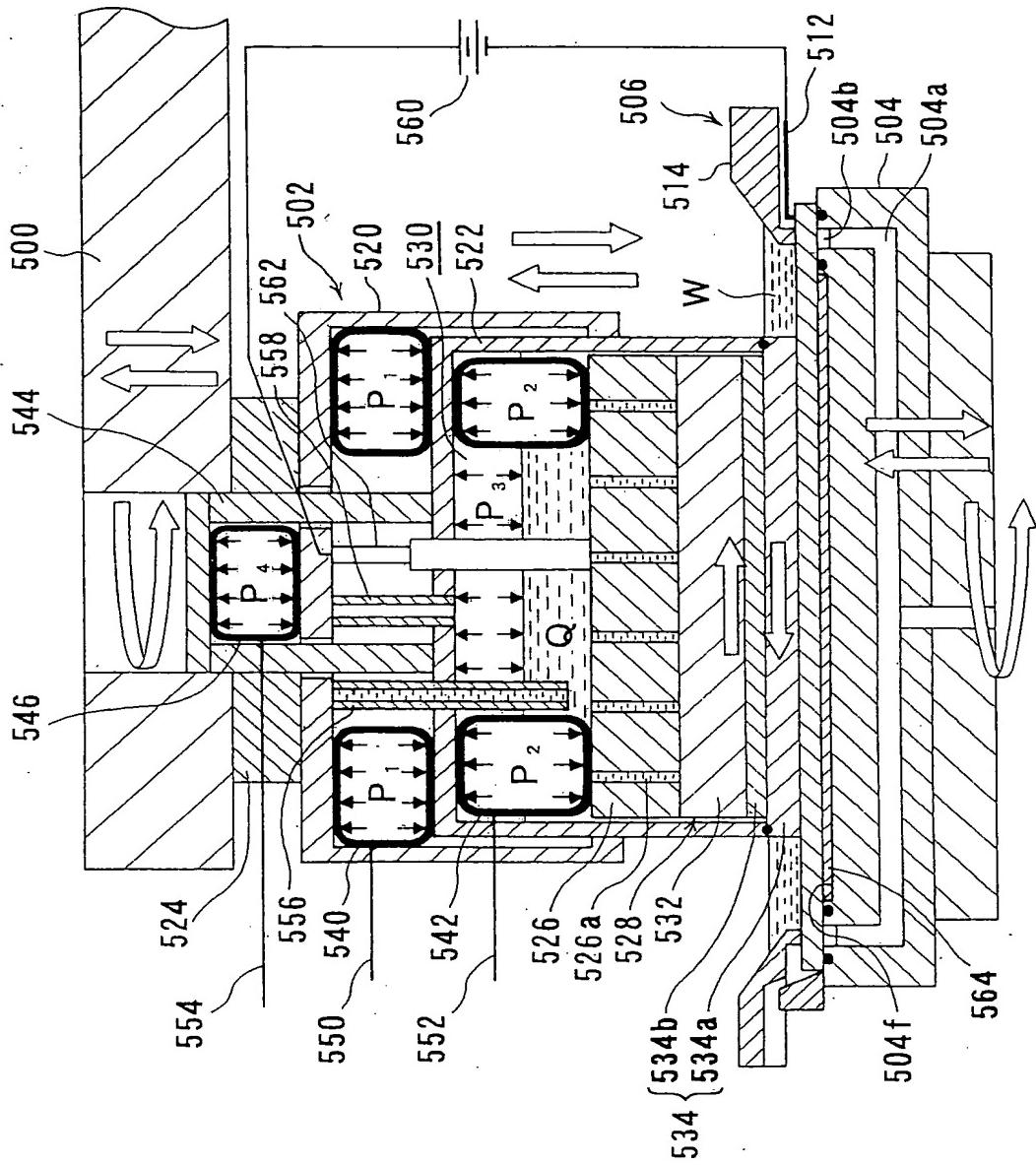
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FIG. 30



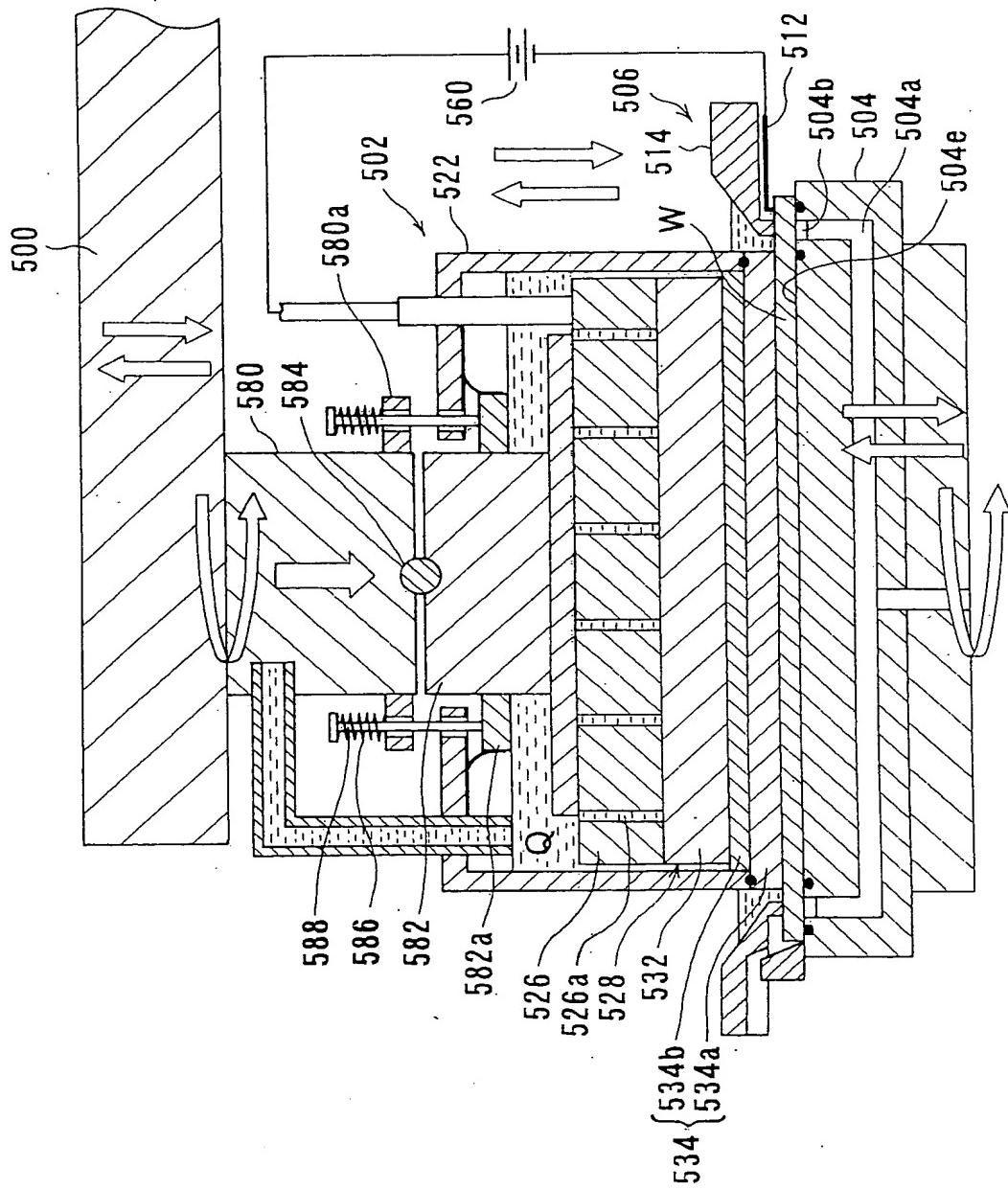
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FIG. 31



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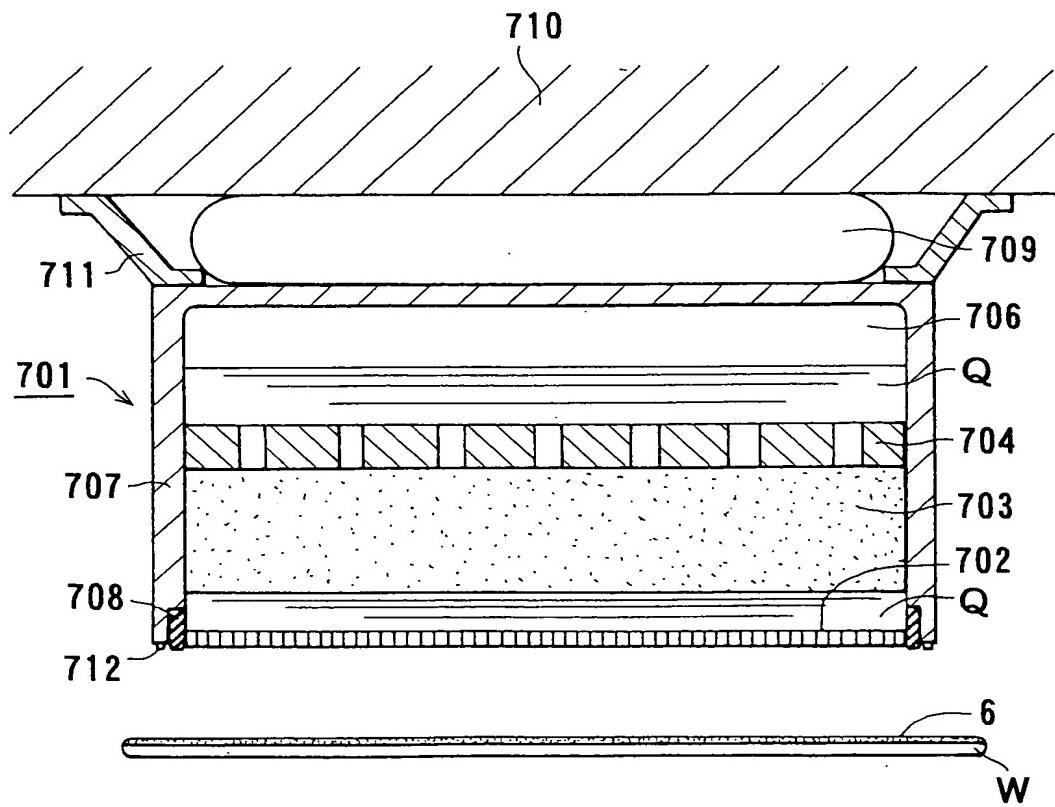
FIG. 32



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FIG. 34

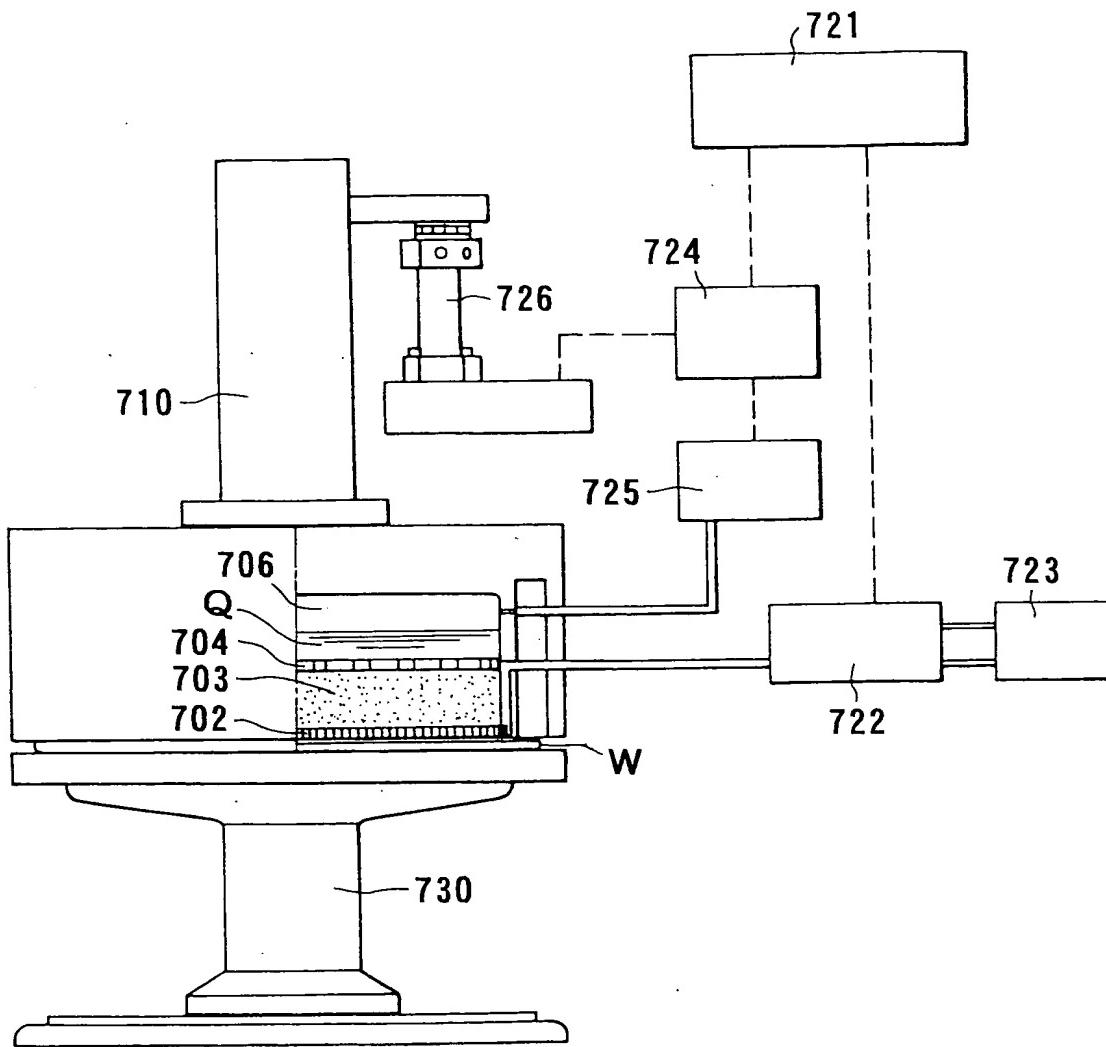
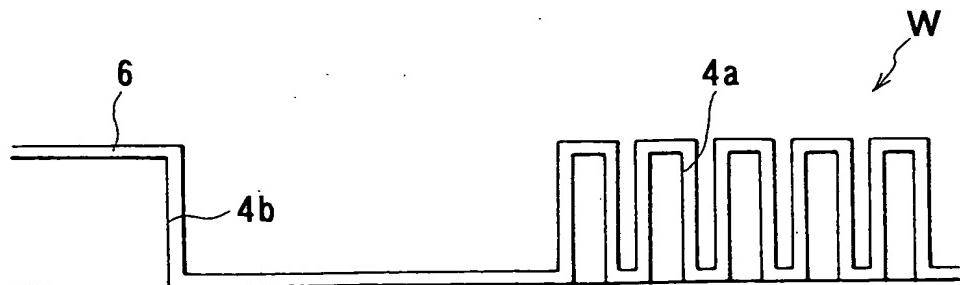
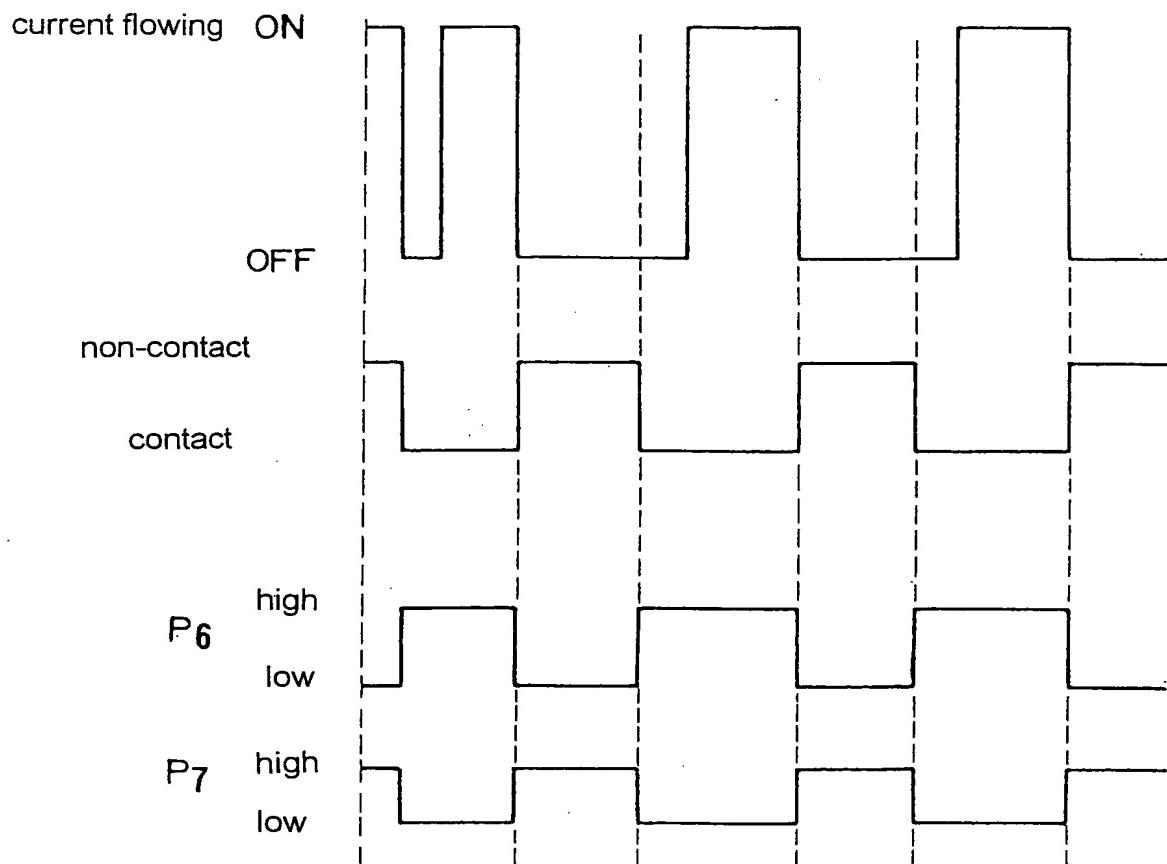


FIG. 35

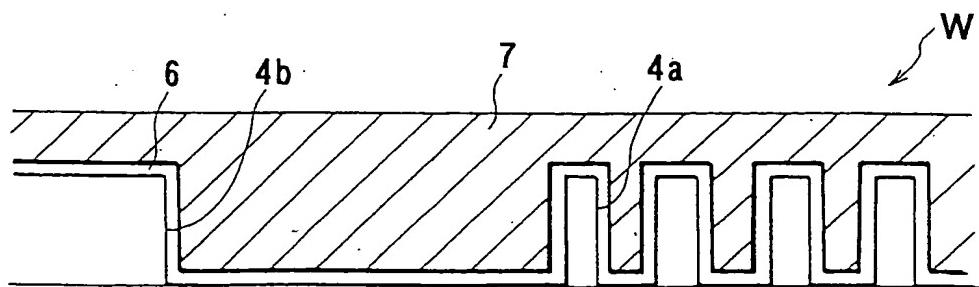


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F I G. 3 6



F I G. 3 7



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FIG. 38

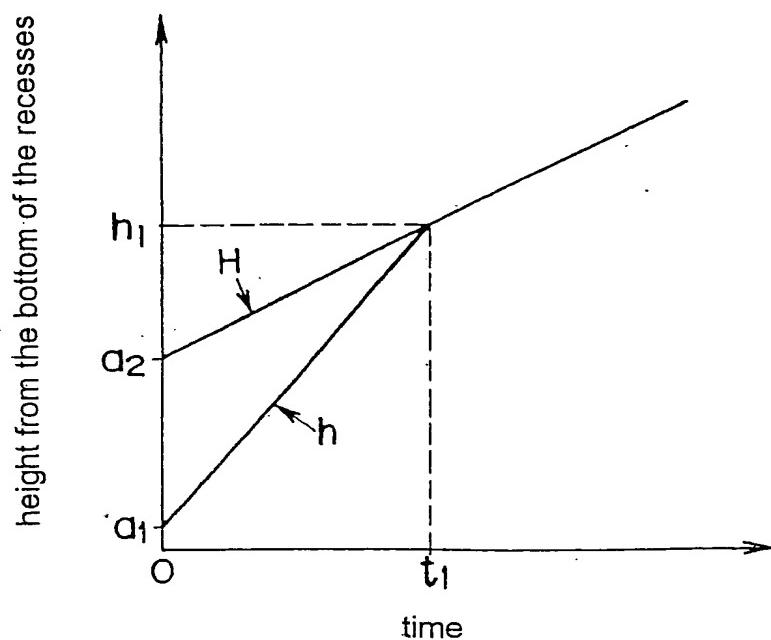
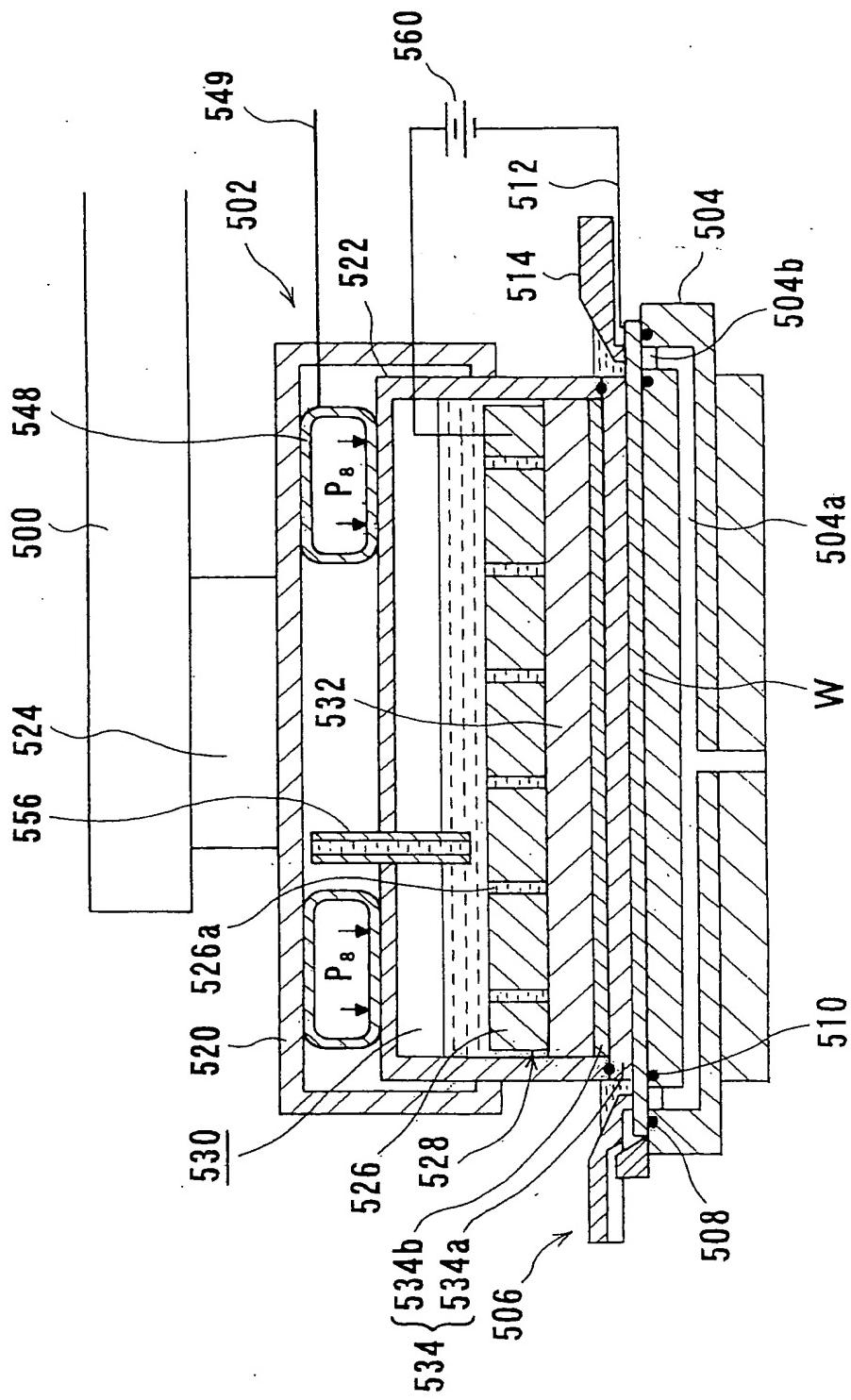


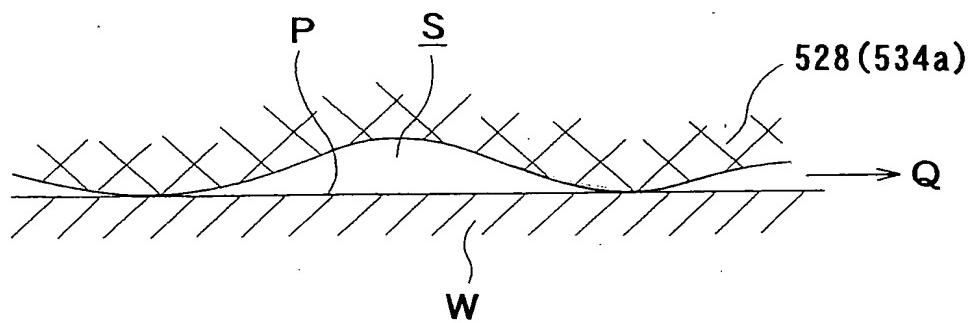
FIG. 39



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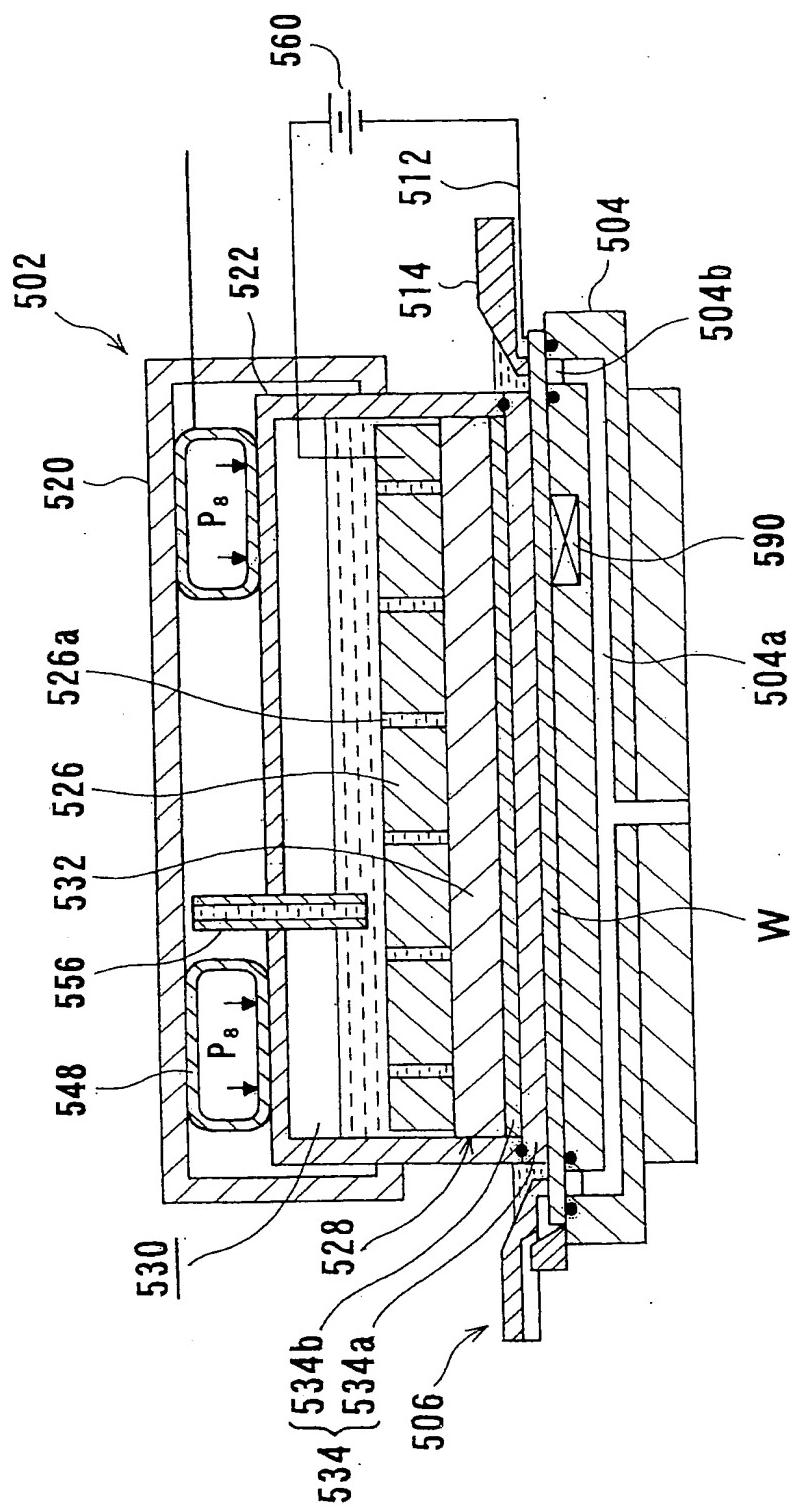
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FIG. 40



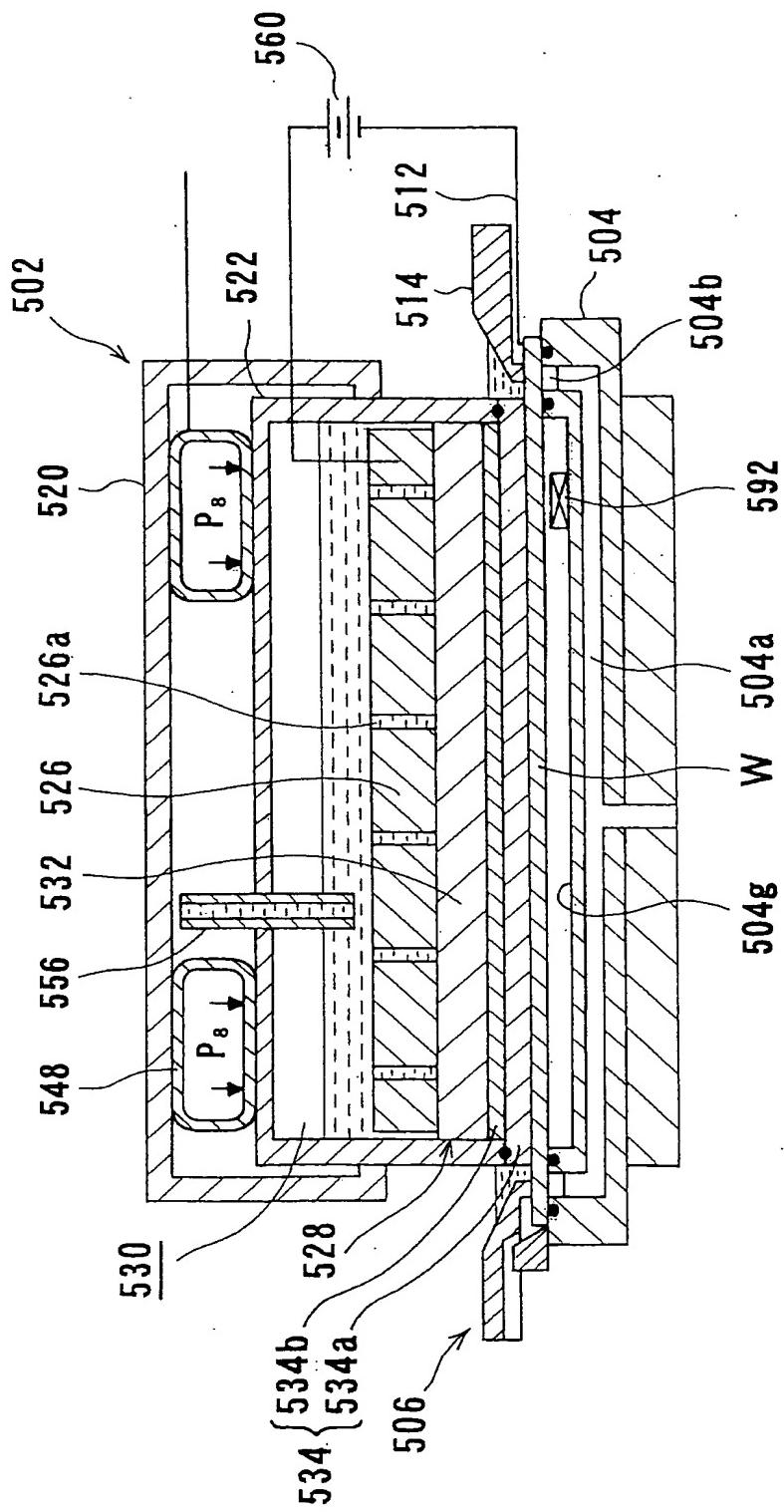
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FIG. 41



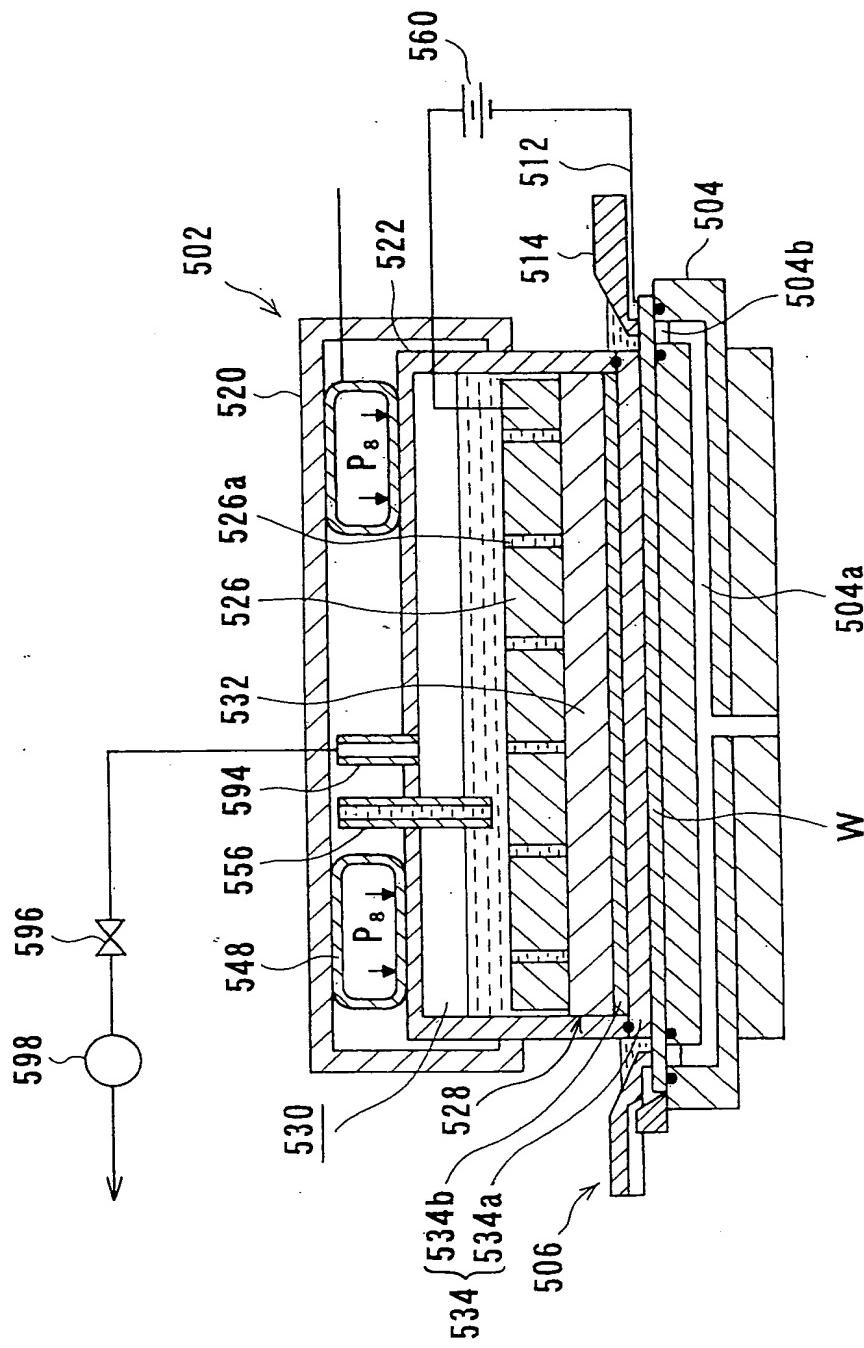
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FIG. 42



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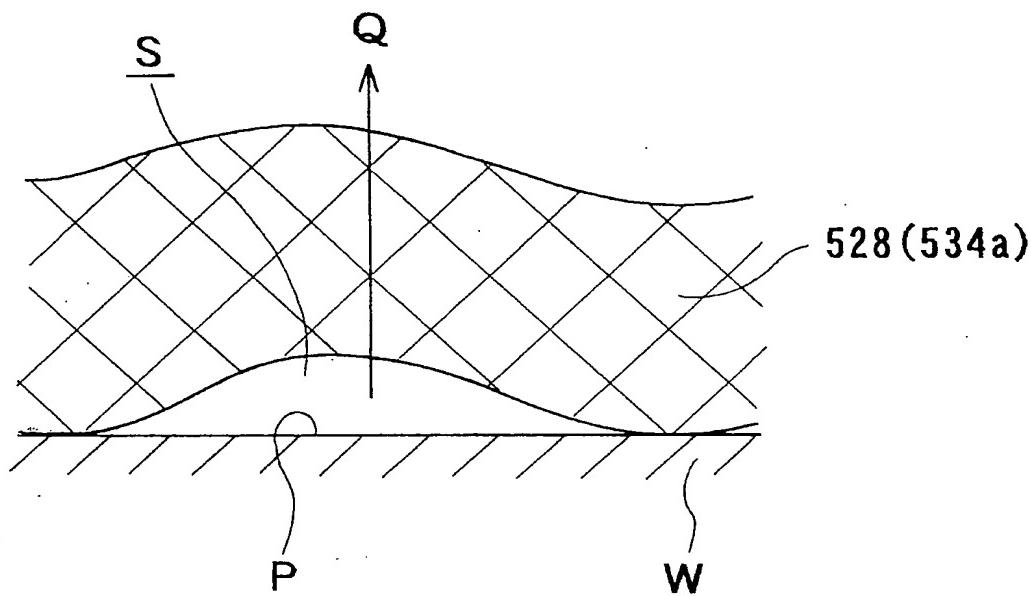
FIG. 43



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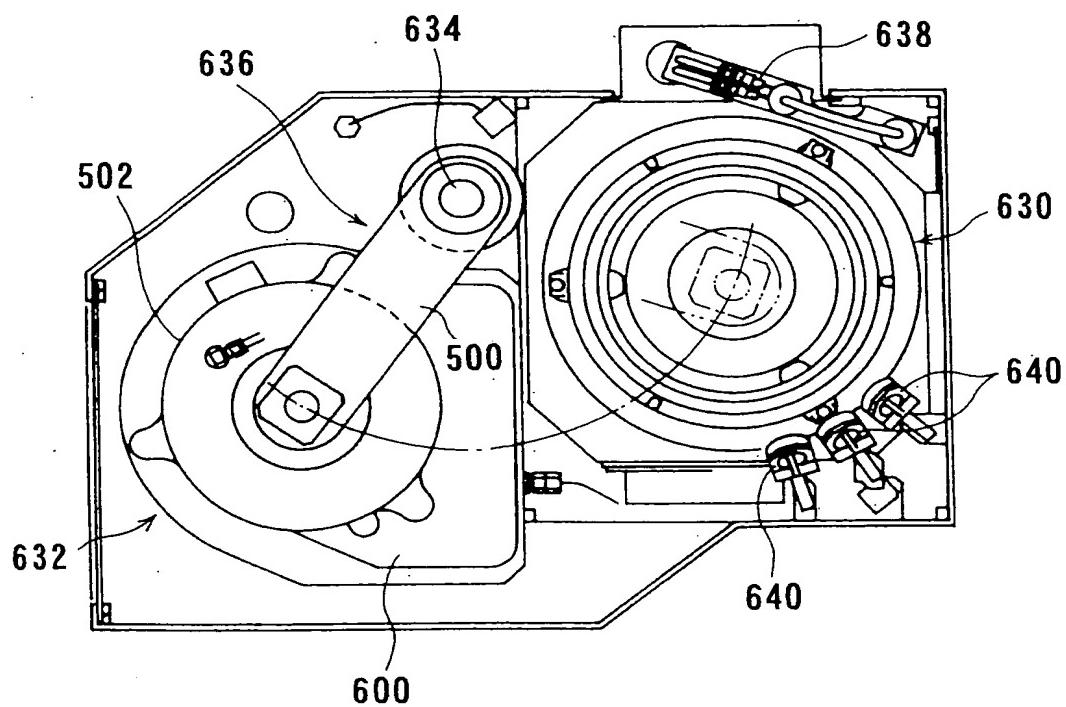
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FIG. 44



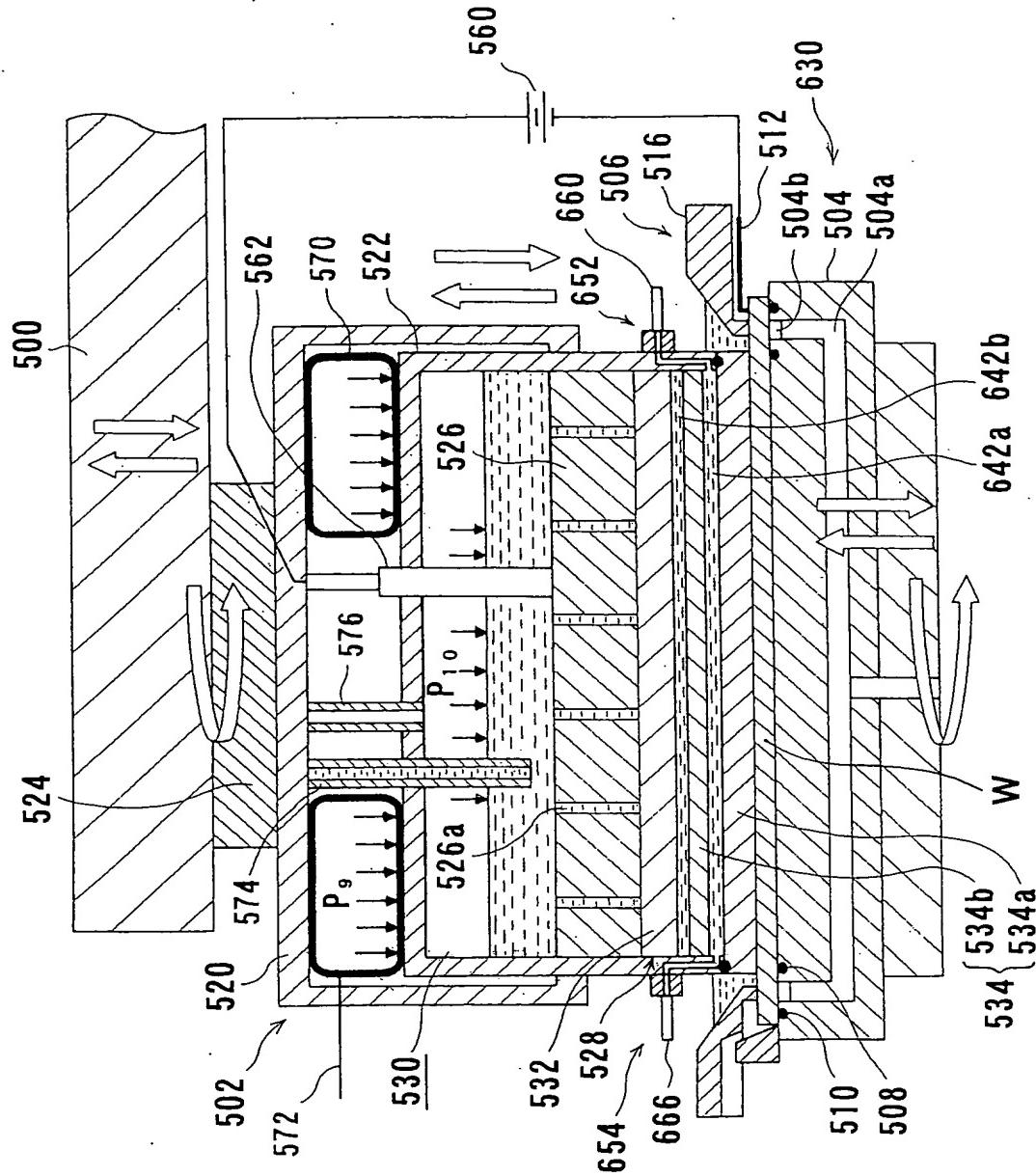
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FIG. 45



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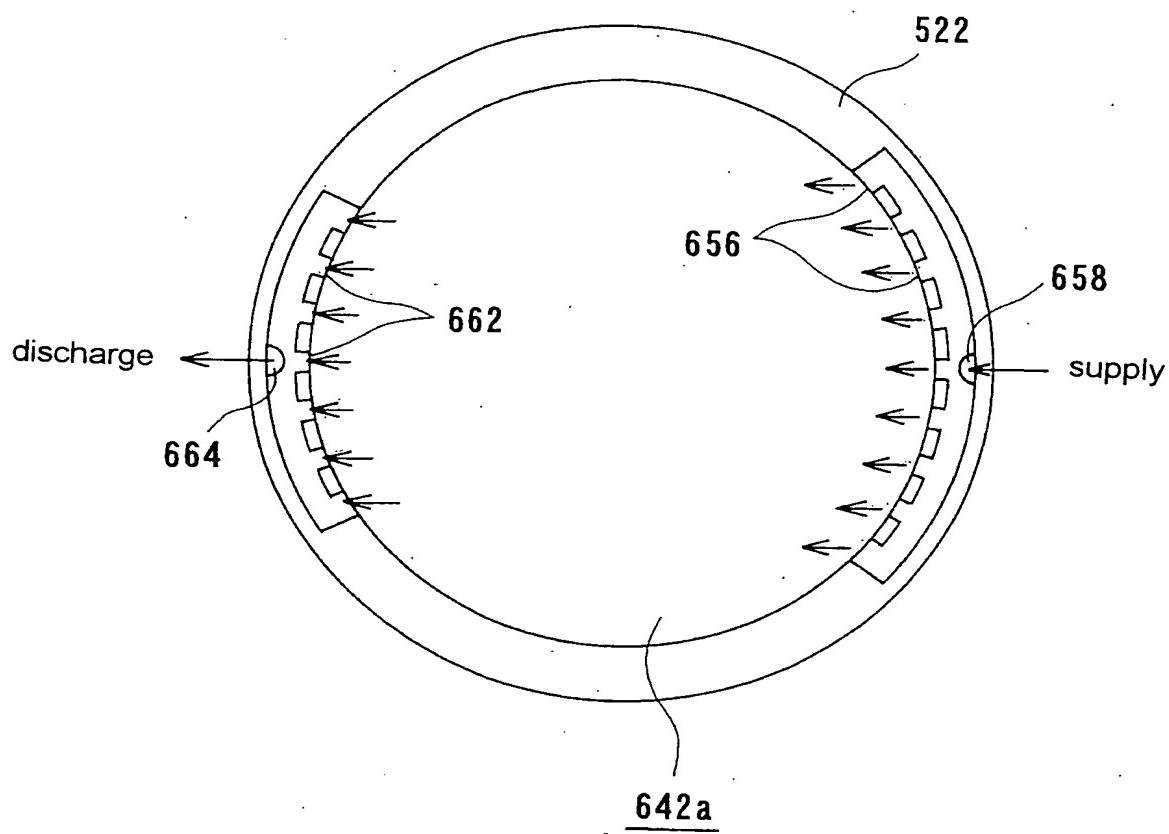
FIG. 46



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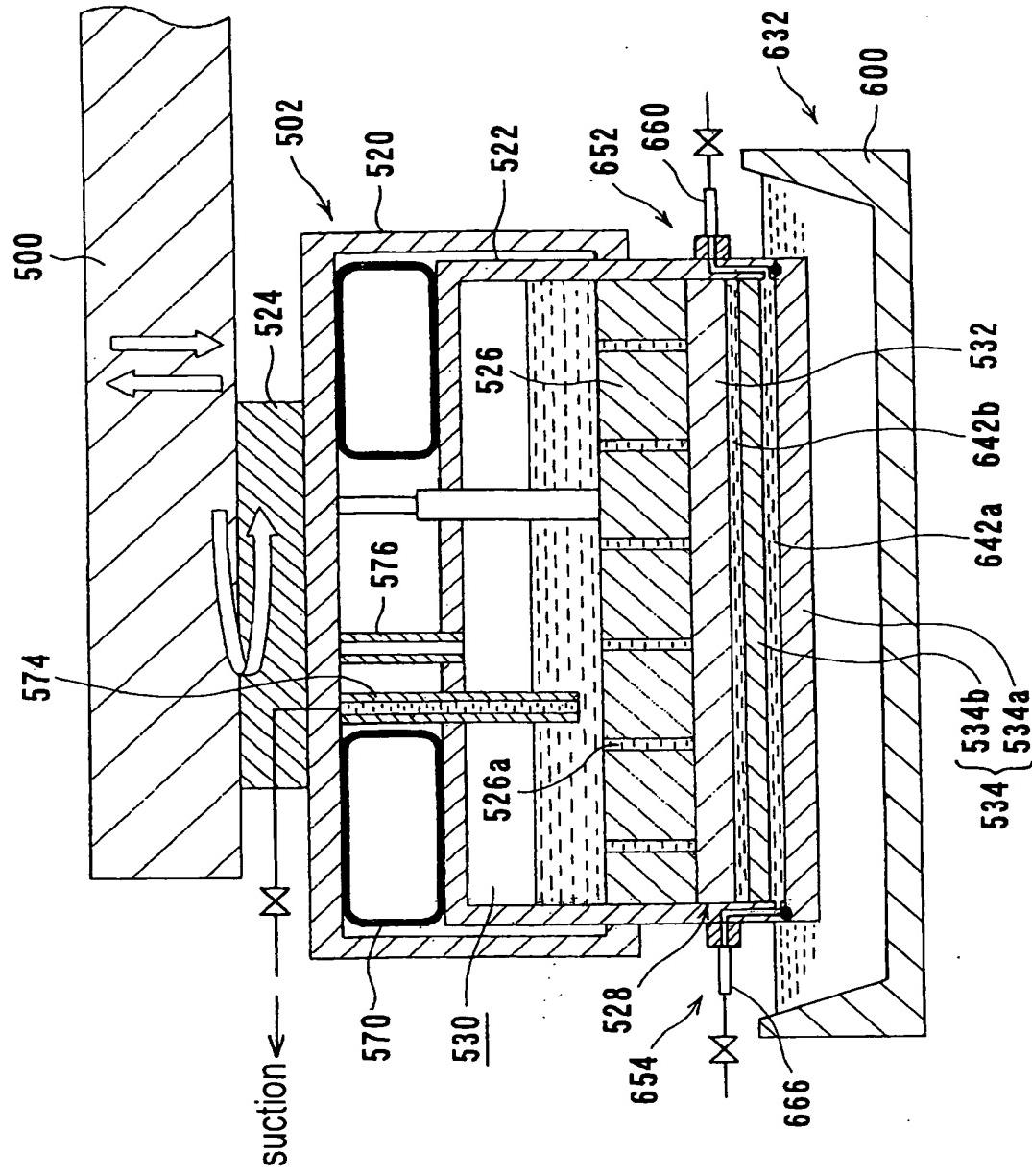
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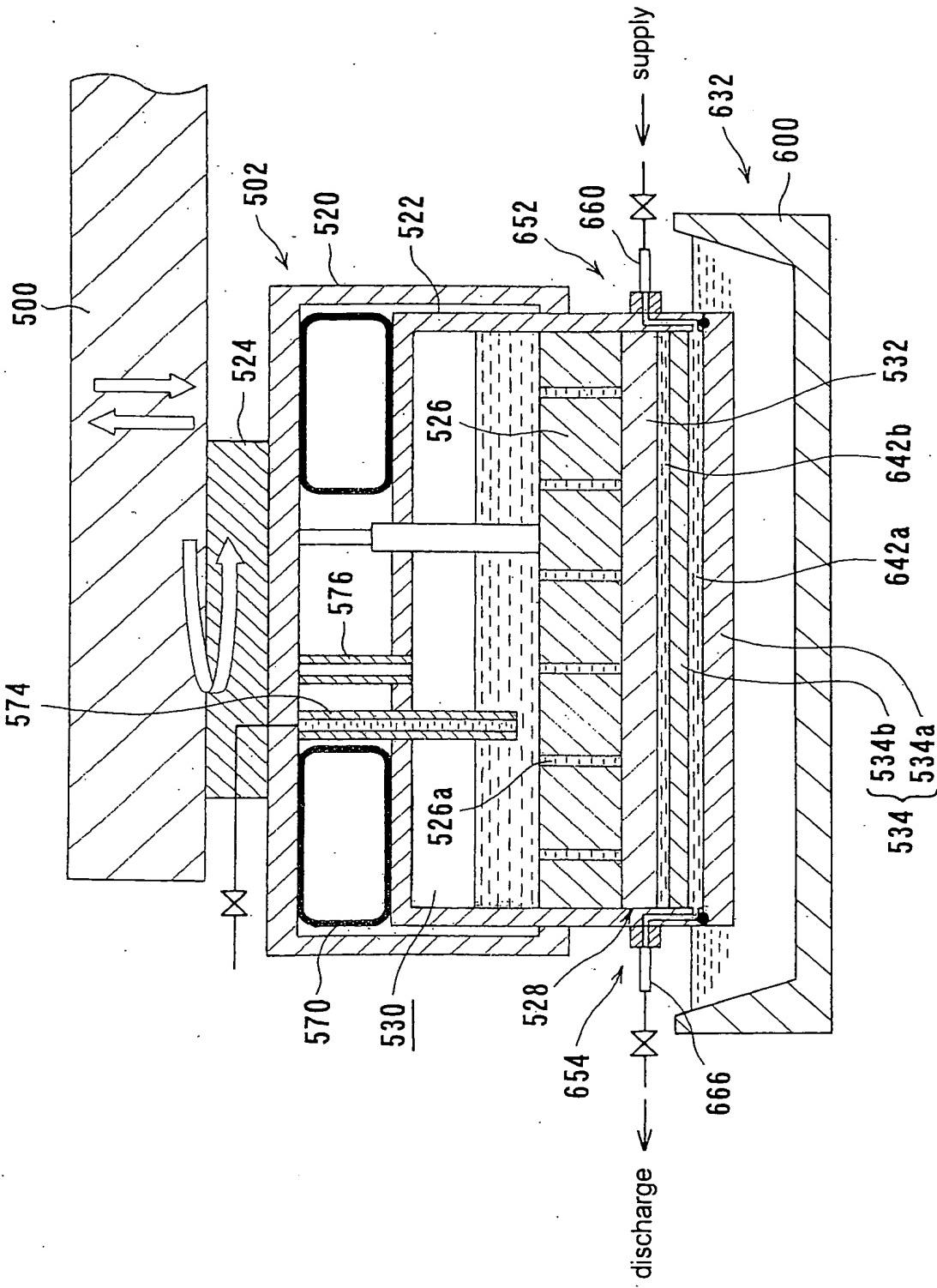
FIG. 48



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FIG. 49



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FIG. 50

